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## I.—THE ARYAN FUTURE.

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## PART I.—THE VEDIC PARTICIPLE.

In the Rig-Veda are found not only verbals of purely adjectival significance, but also adjectives of verbal character, which like active participles govern the accusative. The province of such verbals is enlarged in later literature by the application of terminations, hitherto intransitive, in a new active sense. The usage is doubtless Aryan, and includes nouns as well as adjectives.<sup>1</sup>

<sup>1</sup>In this paper Aryan means Indo-European, Indo-Germanic, Teutarian, etc. Purely adjectival in the Rig-Veda are, for instance, the verbals *svici*, *siṣāsni*, *gaviṣṭ*. In later literature the terminations *-aka*, *-uka*, etc., are added to those of active sense in *a*, *i*, *in*, *u*, *van*, *nu*, *ani* of the Vedic period. The simple root, participles proper modified by affix, *tar*-stems, gerunds, infinitives, so-called absolutes, and stems in *an* complete the Vedic list. Compare Gaedicke, Accusative, p. 184 sq.—who rightly rejects *dīśu* and *didṣṇu* (P. W. and Grassmann with accusative). The corresponding forms *dīpsu*, *siṣāsni* take no object till late (Whitney, Gr. 1178 f. to modify). For *-aka*, *-uka* compare R. V. *pāvaka*, *sānuka* (without object) with the later and active *ghātuka*, etc. Nominal construction of other sort is almost unknown in the Rig-Veda, except in the case of infinitives (Gaedicke, p. 192; Delbrück, Syntax, p. 181). With the noun *mām kāmēna*, A. V., compare the adjective, R. V. 8. 11. 7, *tvāṁkāma*, perhaps also the noun *vanamkāraṇa*, and, A. V. 19. 2. 5, *ayakṣmarīṅkāraṇa* (noun-adjective, Index; P. W. °*a-kāraṇa*). Both uses are familiar to

In the Rig-Veda, unless reduplicated (*i*-stems), the active adjectives are usually limited to compounds, used either with a preposition or with the accusative immediately preceding. How near together lie adjective and participle may be seen by comparing the application of the former in the *a*-class, by far the largest group of active adjectives.<sup>1</sup> Beside *invanto viçvam* stands *viçvam* . . . *invás*, the difference being that the former is felt as stating an additional fact, the latter as an appellation of the preceding subject. The syntactical construction is, however, identical. That the restriction to compounds is not found in other classes (*turvāni*, *sakṣāni*, *kāmīn*) shows that the line of demarcation was at first still less distinct, for when the adjective is uncompounded it may be replaced by a participle that makes an independent clause. Again, active adjectives are not restricted to the simple stem, but are found made, e. g. from causals, as in the case of *nidhārayá*, *-īñkhaya*, *-ejaya*; nor is there any other difference than that defined above between *nidhārayás* and *nidhārayantas*. The constantly increasing number of adjectives in *a* causes the verbals of this declension to be felt as more peculiarly adjectival, and finally results in confining such verbals to cases that exhibited only this relationship with the rest of the sentence, the sole exception being the adjective of this class compounded with a preposition, as is well illustrated by the first of Gaedicke's examples: *valamrujāh* . . . *īndro dr̥ghā cid ārujāh*, 'he that breaks the vala breaks up the strengthened places.'<sup>2</sup> The simple root may be used to make such an adjective, *svarvid*, *dhiyañdhās*, *svarṣās*, or the verbal form + *t*, *svarjit*, as well as without modified object, *açvasās*. Occasionally a striking correspondence between adjective and participle is found, as in *parihrit*, verbal to *hṛt* used exactly like a participle, while the true participle is used only as an adjective, *āvihvarant*. As the participle may be used in the superlative,

the Greek, where, however, are found fewer forms, the construction being more poetical and individual. Aeschylus has *πῶριμος* (an ending not used actively in the Rig-Veda, Gaedicke, p. 190), *οὔριος*, *ρύσιος*, *συνίστωρ* and the verbal nouns *προπομπός*, *πεμπαστής*; Sophocles, *φύξιμος*; Euripides, *συνετός*, *τρίβων*; Lysias and Plato, *ἐξαρνός*; the latter also *ἀνήκοος*, *ἐπιστήμων*, *φροντιστής*. For a late case of active noun compare Dem. 4. 45: *τεθνᾶσι τῷ δέει τοὺς τοιοῦτους ἀποστόλους*. Perhaps the adjective with accusative (in *ώκεις*, etc.) originated in the same construction ('sharpening his pace, feet').

<sup>1</sup> See the list, Lindner, *Nominalbildung*, p. 36.

<sup>2</sup> Occasionally in *-i*, as in *hṛdāñsdni*; *ahañsana*, egoist, is indirect object (cf. *ahañnyā*).

so the verbal adjective may be at the same time verbal and superlative, *vrtrām hāniṣṭhas*, 'he that most-slays Vṛtra.' Finally, each gradation between nominal and verbal signification is successively traced by the stems in *-tar*, which are on the one hand substantives governing the genitive, on the other verbals taking a direct object, their ultimate mission in this capacity being to form a new future tense (periphrastic) unknown to the Rig-Veda.<sup>1</sup>

Turning from the participial adjective to the adjectival participle (Whitney, 450), one finds a number of forms that are in outward appearance participles, but in meaning adjectives (*brhānt<sup>2</sup>at*, *mahānt<sup>2</sup>at*, *pṛṣant pṛṣati*, *rūcant*, *rūcati*, *jāgat*, *ti*, *ṛhānt*) or, perhaps through an adjectival stage, nouns.<sup>3</sup> Besides these forms which have either lost wholly or never completely attained purely participial meaning, there are many active participles that appear as adjectives or adverbs, alone or in composition.<sup>4</sup>

Often the participle appears as adjective by virtue of an a-privative, *ākhanat* alone from *khan*, *ākṣiyamāṇa* alone from *kṣi*, *āchidyamāṇa* alone from *chid*, *āhrayāṇa* from *hrī*, *āsridhāna* (just like *asridh*) alone from *sridh*, etc. In respect of the passive the usage of the Rig-Veda supports the fact established on the use of the participle (adjective) in Avestan, Greek and Latin, that the 'passive participle' in *ta*, *na* stands to the verb merely as an adjective, which is also the relation borne by several middle participles, such as *āsridhāna*, just mentioned, and the not unusual *yādamāṇa*, the latter being the only form representing the verb at all.<sup>4</sup>

<sup>1</sup> Lindner, p. 72 sq.; Gaedicke, p. 185. The accent generally varies with the meaning, but not with regularity. As in Greek the oxytona are usually nouns, the barytona verbals, *pātā* (*sudm*), *mātā* (*padm*), *pātā* (*sōmānām*), *mātā* (*gadvām*).

<sup>2</sup> *Brhānt*, simple stem not used for simple verb; *mahānt*, half adj. inflection; *pṛṣant*, cf. *pṛṣni*, *pṛṣtd*, perhaps from root *spṛc* rather than *pṛcch*; *rūcant*, adj. alone (verb-stem *ruc*); *jāgat* (cf. *jīgat*, *jāgrvi*, intens. adj., *dyu-gāt*, *patañ-gāt*) like *ējat*; *ṛhant*, i. e. *oatē*. On *meka*, *maekant* see Geldner, K. Z. 24, 144; on *gācvat*, *gācvt*, Brugmann, Gr.<sup>2</sup> p. 32. As nouns, *sṛavdt* (ptc. *sṛvat*, cf. *vdhat*, *vahdt*, *vdhantī*, streams), perhaps also *dr̥ṣdd* (= *dr̥ṣdt*, cf. *dhṛṣdt*), *dāt*, *dācan*, *vṛṣan*, etc. For further noun-development compare Whitney, Gr. 383, 1172.

<sup>3</sup> Such are *jākeṣat*, *dōdhat*, *dravdt* (*dr̥vat*, ptc., cf. *drahydt*), *dārp̄yat* (*dārp̄ita*, etc.), *abhi-jīghrantī*, *yēgantī*, *jāñjhati*, *jājhati*, *hēgant* (Vd. St. 47, 89), etc. Like *hayd* the participle *hāyantā* without object must also be taken as the equivalent of an adjective or noun.

<sup>4</sup> Such adjectives are employed to form words of color, but not exclusively. *dsita*, *dsiknī*, *palitā*, *pāliknī*, *rōhita*, *bradhnd*, *ēta*, *ēnī*, etc. (*ta* and *na* united).

The question whether it is necessary to assume that adjective participles are originally verbals, i. e. part of the verb-system, answers itself on comparing the many forms without corresponding verbs. There is no necessity for assuming primitive passivity for *āptā* any more than in the word of corresponding meaning *προσῆκων*, nor does a comparison of forms induce a belief in the original passive force.<sup>1</sup>

Noteworthy are cases where the verb is compounded or has a different stem. The root *cud* gives us in the Rig-Veda *cod* ptc. only as adj., *acodānt*, *cōdiṣṭha*; *cyu*, only *ācyuta*, *hāstacyuta*, etc. as adjectives; *tap*, only *dtapyamāna* as middle adjective (*taplā* as ptc.). From *tan* come *tatā*, *tāyamāna*, *tānā* only in *uttānā*, etc. Traces of a different root are apparent here and there, sometimes of a root in older form. Thus in *ānavapṛgna* there is not the same root as in *pṛktd*, and while *pṛc* is the only root that gives verb-forms, *pṛj* gives the adjectival participle in the Rig-Veda and noun *avaprajjana* in the Brāhmanas (compare *ac*, *aknā*). Again, the participle of *srj* is *srjānt*, but as adjective *sarājant*, that of *tras* (as adj.) is *tardānt*, forms occurring only in these adjective-stems. On comparison with Avest. and Greek it may be doubted whether the forms *srj*, *tras* are older than *saraj*, *taras*

Compare also *pruṣitā*, *pruṣitāpsu* (Whitney, Gr. 1176d). That the meanings interchange between noun, adjective and participle is shown by *dnānata*, *nāthitā*, *nādhitā*, *nādhamāna*, *caritā* (= *cāraṇa*), *ddana* (cf. ἔδανον ἢ ποτόν), *dnna*, *dhāna*, *gvāntā*, *sthāna*, *pūrtā* (noun, *pūrṇā* adj. ptc.), *kistā*, *sītā*, *ḡṇa*, etc., while that even *na*, which of all the passive endings seems most often purely passive, is intransitive, withal active in meaning, is shown by *ḡund*, *anāmṛṇā*, *sadāpṛṇā*, *saṁpṛaḡnd*, *svāpṇa* (ὕπνος), *stend* (cf. *steyā*, *stāyānt*), and perhaps *kārṇa*, *karṇā* (the hearing, ear, *cerno*, *kar* older form of *gar*, *gru*?). With *-itā*-endings compare those in *-atā*, *yajatā*, *darḡatā*, *rajatā*, *haryatā*, gerundive in character (*darḡatā* 'sightly,' etc.) Gerundive are also *dsṛṭa*, *dgṛbhita*. The ending *itā* (*caritā*) rarely gives nominal character; yet compare *jīvītā*, life, and other examples, Lindner, Nom. p. 71; Whitney, Gr. 1176-7. Here may be mentioned the gerundive equivalents *anavabravā*, *sulābhika* (εὐλαβητικός) and the odd diminutive (?) made of the participle *pravartamānakā*. With the form *stend*, steal (no prefix!), *tāyā*, compare Sk. *stṛṇā*, *tṛṇā*; *stṛhant*, *tṛhant*; *stim*, *tim*, stiff, still; *stu*, *tuḡ* (drip); Greek, *stabh*, *ταφ-*; ἄσθηρ, *stṛbhis*, *tépas*, *tārū*; στίζω, *tij*; Latin *stan*, *tan*, tonitru; *sthaḡ*, *στέγος*, *tego*; strideo, *tṛd*; German stossen, *tud*; French state, état; English stomach, tummy.

<sup>1</sup> Compare *βροτός*, *θητός*, *περίστατος*, *ρήτός*, *κλεινός* classical, *κλειτός* Homeric. *Svapānt*, the sleeper, *āsina*, the sitter, like *ὁ φράσας*, the guide, are equally nominal and participial. Compare the quotations, Syntax, p. 372, and especially Delbrück's view on *ta*, p. 382. Osthoff, M. U. IV, s. 72.



(compare *ῥεγ-, tareç, terreo*, and see Pischel, Ved. St. 1. 104).<sup>1</sup> The only forms of a presumable root *si, sinoti (si<sup>2</sup>)* are the participial adjective *ásinvant* and the adjective *asinva*, insatiate. Is one to suppose that a complete verb once existed, or that the participle like the adjective does not necessarily imply more than a theoretical root,<sup>3</sup> from which only these forms were produced? *Áprošivān*, the only form of the perfect ptc., and the only pf. participle of this kind in the Rig-Veda, and *emušām* on account of its accent, may be reckoned out of the discussion, but in *oki-vāṅsā* there is an undoubted instance of an older form of the root than that of the verb, *uc*. From the root *av* comes later the ptc. *avita*, but in the Rig-Veda only *āta*, in compounds *indrotā, yuṣmōta*, etc. The adj. ptc. which is looked upon by P. W. as causal (for *veṣṭita*), viz. *āviṣṭita*, from *veṣṭ*, must be with Whitney referred to *viṣṭ*, and thus stands as the only representative of this form of the root. In the group *grā, grātā, grānā, çr, çrtā, çrtām, çrtāsa*.<sup>3</sup> So in general the weaker form of the root is used to make participles in *ta, na*.<sup>4</sup>

Sometimes the original root appears in the participle when preserved by composition as an adjective, *sūdhita, dūrdhita*, but *hitā*. In *tigitā*, again, as against *tij*, the older form of the root is seen, for it is impossible to separate as non-participial *tigitā* and *palitā* from the kindred participles, *svaditā*, etc. In *spasṭā* compared with *paç*; in *kāma-mūtā*; in *meghā, méghamāna, mehanti*; in *rupitā*; in *mluktā* (A. V. *nimrocat*, B. S. *mluṣṭā*)—wherever any variation appears the form presumably older is that of the participle.<sup>5</sup>

<sup>1</sup> So *ard* adjectives are as old as those in *rd* (*dravard*, etc.); cf. *namaram* (*namrd*), *ugaras* (*ugrd*), *ṛjara* (*ṛjrd*), *citarās* (*citrā*), *Indara* (*indra*), *tivarās* (*tivrā*), *dasaras* (*dasrd*), *dhvasira* (*dhvasrd*), *Rudara* (*Rudrd*), etc. For interpretation of value cf. Whitney, Gr. 371; Kirste, B. B. 16. 294; Bechtel, Hauptprobleme, p. 141, note.

<sup>2</sup> This would not prevent the assumption of a verb produced in other languages from the same root, or even from the same stem; compare *σιῶν* Hesych. *πρῶται*; *σιῶνω*.

<sup>3</sup> Whitney puts *çrtā, çrtā* under *çrī, çr*; P. W. *çrtā* and *grānā* under *grā*; in which obvious confusion the fact here of importance is, however, clear, that the simplest root exists only in the participle.

<sup>4</sup> Compare *tan*, but *tātā, tāyāmāna*; so *aktā, uktd, hatā, ūtd* (*av*), *uditā*, etc., Whitney, Gr. 952-7.

<sup>5</sup> Connected closely are *ru, ruj* (*rugnd*), *rup, lup*. The only Rig-Vedic form is *ārupita*. In A. V. *luptā* with the same root for verb alternating with *rup*.

Some few forms of passive participles support the possible hypothesis that verbals of this kind may antedate pure verb-forms, but not so many as in the case of active participles. If, however, one added all the adjectives and nouns that have the same termination and seem to be of the same origin (the accent generally but not always is shifted), there would be a fair row of verbals independent of the roots that make verbs. The rare participles thus left to represent verbals may, of course, be supposed to be the survivors of vanished verbs, which were once conjugated throughout (like 'friend,' 'fiend'), but as there is nothing to prove the existence of such verbs, one may with equal right assume that, as in the case of active adjective with participial form and without corresponding verb, the *ta* 'participle' passive existed alone, while the verb was never developed. Such are *yādamāna*, not rare; *krākṣamāna* once, with derivative neighbors; *raphitā* once 'miserable'; *jēhamāna* (the perfect future and other forms assigned to "jeh" exist only in the mouth of grammarians), but this may be, as Whitney thinks, a secondary form from *hā* (by P. W. ascribed to *jrambh*, occurs several times, once as *vijehamāna*); *guspitām*, once in R. V., and later, but always thus; possibly *prāsita*, twice, middle, of birds shooting through the air (doubtful, cf. *si*<sup>2</sup> P. W., compare *sūtā*); *dūdhitā* (*dódhat*), several times, either *dudh* or reduplicated, else undeveloped form of *dhū*; *ūnā* (in composition *ānūna*, cf. *ūna-y*); *gadhitā* (*ā, pari*), *gūdhia*; *ā-pibdamāna*, *pibdand*; *bādhdā* (adj. adv.), *bādhishṭha* (cf. *dr̥gham*), *bhāmītā* (?). The forms represented by only one verbal occurrence like *dr̥ṇānā* in R. V. followed MS. by *dr̥ṇāti* (only forms extant), or even in the Rig-Veda itself (*vrādh* occurs ten times as participle, only once as verb) may incline one to believe that the participle represents a verb; while the participles<sup>1</sup> *grathitā*, *mlātā*, *mluktā*, *dr̥kṣita*, *rupitā* (found in R. V. only thus, but with full verbal forms in later literature) prevent any conclusions

Although both *rup* and *lup* are older than the period of unity (*rumpo*, *urupi*, *lupus*), the older must be *rup*. There is perhaps a still older guttural in *rukād*, for *ruc* appears to be of the same root, *rokā*, 'the break of day,' etc., 'the heavens break open (i. e. light up) to their highest'; cf. *frangere*, *flagrare*, *bhrāj*, *\*bhrāñj*, *bhañj*. With *mēghamāna* compare *maegha*, etc. Fick assumes that *migh* comes from *mizh*.

<sup>1</sup> I think *qūrtā*, I. 174. 6, belongs here and is from the same root as *qūra*, victor (Whitney, Grassmann from *qr* for *qirta*), *tvayā qūrtāḥ* 'conquered by thee,' originally 'shake,' cf. *qūrpa*. Natives give *qār*, *qāray*. Compare *pur*, *pūrv*, *pūrb*, *pūrta*, *pūra*.

drawn from the chronological order of appearance, since the verb follows the participle too soon to doubt that it existed contemporaneously. Nevertheless, participles without other trace of verb at all are not uncommon in the later literature, and it is impossible to suppose that the verbs have all been lost for (*iḍtas*) *iḍant*, K. B., *klathan*, B., *viklavita*, C. v. note, *khadant*, G. B., *ujjhaṭita*, C., *ḍamant*, C., *dūta*, *uddrāḍayan*, C., (*yahvānt*), *roṭhamāna*, R., 'āreḍatā mānasā,' BS., *lañcita*, C., *vruḍita*, C., *ṣalant*, *ṣalita* + *ud*, C., *str̥hant*, S., *sphaṭita*, C.<sup>1</sup>

Returning to the Rig-Veda: Important is the participial representation of verbs in other than present stems. Thus the later common verb *svid* is represented here only by the perfect participle *siṣvidānā* (A. V. *svinnā*). But besides participles present and perfect, of the causal we find, e. g. *nartāyant*, *lobhāyanti* (*prati*), *sphūrjāyant*, *srevāyant* as sole representatives; in the desiderative, e. g. *būbhūṣat*, *jījyāsatas*, *dīpsantas*, *rūrukṣatas*, alone. Particularly is this true of the intensive stem. The participles *carcuryāmāna*, *nenīyāmāna*, *pēpiṣat*, *pōpruthat*, *pānīphaṇat*, *rā-rakṣānd* (pf.), *rārajat*, *rōruvat*, *rōrucāna*, *cāniṣcadat*, *ṣūṣrūṣamāna*, *ṣūṣvasat*, *ṣūṣujāna* (*ṣvañc*), *sāniṣyadat*, etc.,<sup>2</sup> are the only existing intensives of their respective verbs in the Rig-Veda.

There is found in the Rig-Veda a comparatively large number of denominative stems that are registered as verbs but occur only as participles. Observe:

*adhvaryāntā*, once, no verb, *adhvari* ptc. and verb, acting the *adhvaryū*.

*añkūyāntam*, once, no verb, *añka*, acting or wishing *añka* (*añku*?).

*ānnīyate*, once, no verb, accent ! wishing *ānna*.

*amitrāyāntam*, thrice, no verb, acting the *amitra*.

[*arātīyatās*, once, no verb; verb in A. V.].

*avasyatē*, once, no verb, acting the *avasyū* (wishing *avas*).

*aṣvāyatē*, etc., five, no verb, acting the *aṣvayū* (wishing *aṣva*).

*asūyān*, once, no verb, verb late (*asūyā* late), fretting.

*iṣūyatē*, once, no verb, *iṣu* ? desiring.

<sup>1</sup> These, together with participles mentioned already, and omitting *thūrvant*, *rañgant* and *mañita*, which Whitney marks respectively as 'false reading,' 'doubtless artificial,' and 'assumed,' make up the list of participles given without verbs in the Roots. I have not noticed the occasionally appended 'doubtful' except in these three instances, as the doubt seems based on the fact of the form being unique. C., 'classical.'

<sup>2</sup> The list does not aim at completeness.

*ukṣanyāntas*, once, no verb, *ukṣanyú*, acting the *ukṣán*.

*udanyān*, once, no verb, *udanyú*, Pāṇ. wishing *udán*, or (P. W.) watering.

*ṛjūyāntam*, etc., five, no verb; *ṛjūydmānas*, once; *ṛjuyú*, acting *ṛjū*.

*ṛtāyān*, etc., twelve, no verb; verb *ṛtay*; *ṛtāyú*, acting *ṛtá*.

*ojāyāmānas*, *am*, thrice, no verb, *ojas*! acting with *ojas*.

*kaṇṇakayāntis*, once, no verb, no noun, adj. meaning?

*kavīyān*, *-dmānas*, once each, no verb, acting the *kavī*.

*kulāyayāt*, once, no verb, acting *kulāya* (nestling).

*kṣemayāntam*, *āntas*, thrice, no verb, acting *kṣēma*, being at rest and giving rest.

*gavyān*, etc., fifteen times, no verb, *gavyú* and *gavyayú*, wishing (*gās*), lusting.

*caranīyāmānā* f. s., once, no verb, *carany*, verb A. V., acting the *carāṇi*.

[*janīyāntas*, twice, no verb; verb in A. V.]

*jmāyāntam*, once, no verb, *jmā* or *jman*, seeking earth, or wishing (making) way.

*taruṣyatās*, pl., once, no verb, *tārus*, *tāruṣa*, acting the *tāruṣa*.

*tvāyāntam*, *tuāyātā*, etc., nine, no verb, *tvāyā*, *tvāyú*, affecting thee.

*durhaṇāyatās*, sg., once, no verb, *durhaṇāyú*, *durhrṇāyú*, acting, wishing, ill.

*devayān*, etc., about fifty times, no verb (A. V. also only ptc.), *devayú*, seeking gods, pious.

*dhiṣanyāntas*, once, no verb, *dhiṣā*, *dhiṣāṇā* (*dhiṣ*, *dhā*, P. W.), wishing to worship gladly.

*pitīyatās*, sg., once, no verb, wishing food, *pitú*.

[*putrīyāntas*, once, no verb; verb in A. V. once.]

*ṛṭtanāyāntam*, once, no verb, *ṛṭtanāyú* (*ṛṭtany*, verb and ptc.), striving or wishing strife.

*brahmanyatē*, etc., five, no verb, *brahmanyā*, doing *brahmān*, pious.

*bhandanāyatās*, pl., once, no verb, wishing *bhandānā* (fame, Gr.), *jauchzend* P. W.

*mānavasyatē*, once, no verb, *mānava*! Sāy. wishing priests, acting the man.

*yajñāyatē*, once, no verb, *yajñā*, active in *yajñā*, sacrificing.

*yusmayāntis*, once, no verb, affecting you.

*raghūyāt*, once, no verb, *raghū* (cf. *raghuṣyād*), acting *raghū*.

- rathirāyātām*, once, no verb, acting the *rathirā*, swift.  
*rathīyāntī*, once, no verb, acting with *rātha*, wishing to fare.  
*rayīyān*, once, no verb, *rayī*, wishing wealth.  
*vadharyāntīm*, once, no verb, *vadhar*, acting or (Sāy.) wishing the *vādhar*.  
*vasnayāntā*, dl., once, no verb, *vasnā*, higgling.  
*vrjināyāntam*, once, no verb, acting *vrjinā*, cheating.  
*ṣatrīyāntam*, etc., five times, no verb; A. V. only ptc., acting the *ṣātru* (= *ṣātrus*).  
*ṣarmayāntiā*, inst., once, no verb, acting as or wishing *ṣārma*.  
*ṣrudhīyatās*, pl., once, no verb (*ṣrudh*, cf. *gūrdhāy*, Altind. Vb., p. 202; Ved. St., p. 191); obedient.  
*sakhīyān*, etc., seven times, no verb, acting the *sākhi*.  
*sacānasyāmānā*, once, no verb, acting or wishing *sācanas*, in a helpful way.  
*sacasyāmānas*, once, no verb, acting with \**sacas*, 'receiving aid.'  
*sanāyatē*, once, no verb, *sāna*, *sanāyū*, acting old, being old.  
*samaryatā*, once, no verb, acting *samarā*, or wishing (strife).  
*sumānasyāmānas*<sup>1</sup>, *ā*<sup>1</sup>, *ās*<sup>2</sup>; eleven times in A. V.; also later; always ptc.; *sumānas*, being well-minded, well-disposed or happy.  
*sumnāyān*, etc., five times, no verb, acting the *sumnāyū*, well-disposed.  
*stabhīyān*<sup>1</sup>, -*āmānas*<sup>2</sup> *am*<sup>2</sup> (cf. *stabhāy*, causal), standing, or wishing to stand, firm.  
*hr̥ṇāyāntam*, once, no verb; cf. *hr̥ṇīyāmāna*, *durhr̥ṇāyū* (s. v. verb *hr̥ṇīy*).<sup>1</sup>

There are thus, without reckoning doubtful causatives of the same character,<sup>2</sup> nearly as many denominatives that exist only in

<sup>1</sup> The verb *hary* occurs *haryānt* (v. Gr.), *hāryant* (v. P. W.). *Vājdyant* and *vājayānt* are also doubtful, as they may be causal or denominative, most of the verb-forms being regarded as of the latter class by Whitney (A. V. MSS have *cyānti* against causal in text). But some twenty-four cases of this participle appear as denominative, while the verb-forms may be all causal. For parallelism with adjectives, compare: *aṣṭayāntaḥ* . . *vājīnaḥ* . . *gavyāntaḥ*; *gavyāntaḥ* . . *aṣṭayāntaḥ* . . *vājayāntaḥ* (see R. V. 4. 17. 16; 7. 32. 23; 10. 131. 3; 160. 5). As purely adjectival *advayāntam* might be added. On *aviśyān* see below. The ending occasionally varies, as noted above, only one form giving the verb. Sometimes the long vowel is found later, as *kr̥ṇay*, Vedic; *kr̥ṇāy*, Mbhā., etc. Words in the list found in A. V. as verbs are bracketed.

<sup>2</sup> Compare *ṣucāyāntam*, etc., only the causal ptc. of this stem, but *ṣocaya*; *jārdāyāntī* (*jārdāyāntī*, etc.) only the ptc. of the causal; *damāyāntam* only in this ptc., withal not in causative sense but = *damayāntam*.



participial form as there are real verbs of this class. Not quite half of the whole number are purely participial. Conversely, however, with the exception of the verbs from *a*-stems, it is seldom that denominatives make verbs without being found in participial form.<sup>1</sup> That the denominatives are still incipient in form is shown by the fact that at this period they have not yet attained to the possession of a future tense, which is subsequently (ÇB.) developed, and have but one doubtful aorist form (*ūnayīs*); not till the Brahmanic period is the verb well developed (see Whitney, Gr. 1068).

As then it would be rash to judge from *ūnayīs* that other Rig-Vedic denominatives had in use aorists which by chance were not represented in our extant hymns, but rather right to say that in this form lies the beginning of an extension of the denominative system to other tenses than the present (the form occurs only 1. 53. 3), so, seeing that the participial is everywhere the prevailing form in the Rig-Veda, and that many denominatives have only participles while few have verbs without participles (the ratio in the A. V. being also such that personal forms are less than participial, Wh. Gr. 1057), it is not, perhaps, rash to conclude that the participial is the first denominative form, and that from this was developed the verb with personal endings. In fact it requires too much imagination to suppose that *gavyānt*, used fifteen times as a participial adjective, and never as a verb; and *devayānt*, used in R. V. and A. V. together more than fifty times as participial adjective, and never as a verb, were originally verbs. Not less convincing is the number of these denominatives used but once, seldom as verb alone, often as participles.

So far as other present stems are concerned the probability of the adjectival participle not being originally a factor in the verbal system is strong enough to warrant the assumption that in the creation of new verbal classes such participles may have antedated personal verb-forms; for *mahāntam*, as in meaning it is older than *mahema*, etc., so in form cannot have been a participle developed out of the verbal system, but must have existed independently.<sup>2</sup>

<sup>1</sup> *Ajirāyāte*, no ptc., has the *a*-stem lengthened; so *śubhāyāte*; from other stems cf. *rathary*, thrice verb, no ptc.; *kratūy*, twice verb, no ptc., but the examples as compared with those above are few.

<sup>2</sup> That other present systems are denominative in origin has been admitted in a general way for a long time. If one bears in mind the fact that the endings *ta* and *na*, *nu*, *ni*, which make adjectives, nouns, and quasi-participles are,

It seems, then, possible if not probable that verbal adjectives

as explained above, primarily expressive of adjectival and intransitive participial rather than of the later passive participial relation, he may perhaps see these suffixes in the make-up of the *ta* and *na* verbs. Such verbs are distinguished from those of the simple stem by being more nominal in character, as the verbs with raised root-vowels are adjectival and gerundive. Thus *bháva-ti* and *dbhavat* are denominative in the sense of *bhavd* plus verbal endings, and so also while *dkar* means 'he made,' *karó-mi*, *kṛṇó-mi* means 'am a-making,' from \**kṛṇd*=*kṛtd* (cf. *pletus*, *plenus*, *plerus*), as in the form above *ānayis* is from *ānd*. In Latin the *ta*-ending was preferred, *beto*, *capto*, *captus*, but also *dano*, *dignor*, *dignus*, etc.; in Greek, the nasal *nu*-forms (*κορέω*, *κορέν-νυμι*) prevail, but those in *to* are still preserved, *κρύπτω*, *κρυπτός*, etc. (cf. *σκήπτ-τός*, *σκήπ-τω*, *skabhnāmi*); in Sk. only the nasal suffix is used, *nu*, *ni*, also kept in verbal adjectives, *dhārṇs*, strong, *tūrṇi*, hastening, *dyotantī*, the shining; *gr̥dhnū*, hastening, *sānū*, pressing; as well as the forms in *na*, *vdr̥ṇa*, covering, *ghṛṇd*, heating, *ānna*, eatable, with the so-called participles. The ending *na* seems to have been established as verbal adjective first and incorporated as a verbal class; the ending *ta* later, as the more popular ptc., usurped the position of *na* in this regard, while the latter, confined to a few verbs as participle, for the most part retired to the verbal class. But in Greek and Latin *ta* intruded on the prerogative of *na*, and like it became active in creating verbal classes. Thus in Sk. is found from the root *str̥* the verbal adjective-stem *st̥dra-te*; then from the participial adjective *st̥rṇd* (older form of *st̥r̥ṇd*, preserved in *bhūst̥r̥ṇa*) *st̥rṇd-nti*, etc., while *st̥r̥td* is kept as adjective participle; and from *r̥* with ptc. *r̥ṇd* either the secondary ending *dh* added to the nominal stem, giving *r̥ṇadh* (cf. *dsvapṇaj*, *tr̥ṇdj*), or this secondary ending added first to the simple root and then the complex treated in the usual manner, *r̥dh-na*; again from *pr̥*, *pr̥ṇd-c*, etc. So *du* is to agitate, *dūnd* agitated (*ddūna* A. V.), and *dunoti* is 'burns, is agitated, distressed' (cf. *dhū*, *dhūmds*, *θυμός*); *u*, to call *uno-ti*, is calling. The significance of the stem-meaning becomes apparent when applied to the so-called root-aorist, which is nothing but a preterite to a root-present, its aoristhood being not that of tense but of stem, i. e. the act registered by it is simple and unlimited—*kdr̥ṇi*, thou makest, *dkar* thou madest, while *bhāvati*, *gacchati*, *kṛṇóti* express 'he is becoming, is going, is doing'; their preterites *dbhavat*, etc., express 'he was becoming,' etc., as distinguished from *dbhūt*, *dgāt*, 'he became, he went.' The simple present-stems with the increasing raised-stem and nasal denominatives gradually declined, but the preterites remained longest. Hence a distinction originally of stem was conceived of as inherent in the tense that alone preserved many of the forms, and so root-preterites were regarded as differing from denominative preterites. And they did indeed practically differ, not, however, by virtue of a special preterite meaning (aorist) inherent in them, but because the other preterites (imperfects) were preterites to stems which from their very origin expressed more broadly the verbal action than could the simple stem whether past or present. There came in addition the *s*-aorists to help the confusion, which are to root-preterites as futures are to root-presents; but it will be seen that even *s*-preterites had their corresponding presents.

which in form and function were identical with participles, and <sup>1</sup> which, from the point of view of their ultimate development, one may most conveniently call participles, have preceded in some cases the existence of personal verb-forms of the same stem, and that new verbal classes, whether independent of these or not, may arise after the participial system is completed.

To return to tense-systems: although *arṣasānā*, *jrayasānā*, *dhiyasānā*, *rabhasānā*, *śdvasānā* should presuppose verbal forms, yet the corresponding tenses are wanting, if not the complete conjugation. As in the case of *devayānt*, which knows no *devayāti*, so in *arṣasānā* there is only a form with sigmatic element and ending common to participle and adjective, nor need one here seek a verb, nor for the others an aorist tense-formation.<sup>2</sup>

<sup>1</sup> There is current a popular half-schooled prejudice against 'and which' which is likely to annihilate a correct use of the idiom and which only a lack of discrimination fosters.

<sup>2</sup> These forms in *ānā* contain no primitive ending of the middle ptc. That ending was *mna* or *mana*. In Indo-Iranic, comparing Sk. *āna*, *māna*, Avest. *āna*, *ana*, *anā*, *mana*, *mna*, I think that *āna* was probably, as is the case with *māna*, originally not *āna* but *ana*, and it can scarcely be doubted that the *a* was an element not of the ending but of the stem. If one notes the shifting accent of the nominal formations, like that of the adj. ptc. in *na*, he sees the same state of things as in the adj. ptc. in *āna*, *īcānā*, *īcāna*, *āsānā*, *āsāna*, etc., and so far as Indic goes the *ā* could well be explained by the fact that *ā*-roots with *na* (in distinction from those in *ta*) make such forms as *hānā*, *gyānā*, etc., which may well have been the original state of things, for the ending is the same as in the *na*-nouns, *bharāṇa*, etc. The *na*-ending called 'preterite' is of course primitive. Euphony against the combination consonants + *mn* led to the gradual restriction of this ending to thematic stems, while *nā* in the form *ānā* was retained after consonants. Each was originally joined with either (cf. Bartholomae, Handbuch, p. 357). In the Veda it is only *māna* (by analogy with *ānā* after the earlier establishment of this form), which keeps a markedly present force (in distinction from *ta*); it is only *ānā* which interchanges as purely adjectival ending—*cyānā*, *ūrdhvasānā* (Whitney, Gr. 1175) and has a purely adjective sense, *cakānā*, etc. Compare Delbrück, Syntax, p. 379 (the *ānā* ptc.) often 'comes close to the ptc. in *ta* in preterital sense.' In prose *ānā* is almost exclusively preterital (ib. p. 381), i. e. not present. *Hyānā* is older than *hiyānā*, *svānā* than *suvānā*, so that the *na* of *bharāṇa*, etc., must long have been regarded as *bhar-ana* instead of *bhara-na*. But it is quite possible that *na* itself after consonants became *ana* (cf. *ata*). In either case syntactically *ana* is identical with *na*, *ta*; an adjectival, not a present middle ending in the sense that *māna* is, nor is *ā* (in *ānā*)=η-v.

PART II.—PARTICIPIAL AND VERBAL *sy*-FUTURES.

Delbrück (*Verbum*, p. 183) says: 'it is comparatively seldom that there is occasion to use the future in the texts of the Rig-Veda,' and would thus explain why so few cases of future form are found in the hymns. The explanation seems to me not quite satisfactory. A glance at the passages translated as futures in the same author's *Syntax* will show that there was opportunity enough to use the future, but that to express it other means was employed than that of the *sy*-tense.

This, however, remains true, that, in view of the extent of the literature, verbal forms of the *sy*-future with personal endings are extremely rare in the Rig-Veda. Such forms in comparison with those of the participle are few, but this mutual proportion gradually shifts as we reach later literature, so that, while in the Rig-Veda there are twenty-nine occurrences of participles of the future and only sixteen or seventeen occurrences of corresponding verbal forms with personal endings, in the Atharva-Veda there are twenty-one occurrences of participles of the future and fifty-two occurrences of corresponding verbal forms with personal endings. Further, it is known that the number of roots making *sy*-futures grows constantly greater in the post-Vedic literature; and, finally, while but one sure case of subjunctive and one conditional are found in the Rig-Veda, several subjunctives and conditionals occur in the prose period, and ultimately comes the imperative. In a word, what probably no one will deny, the *sy*-future, in spite of the later rivalry of the periphrastic future, is in no sense moribund, but is growing in the Vedas, and waxes greater thereafter. Whether accident and circumstances or other causes produced the rarity of forms in the Rig-Veda must now be investigated.<sup>1</sup> And first the future participle.

There is one difficulty in interpreting the future forms which appears at the outset and accompanies one all the way. In the list of denominatives given above it will have been seen that in *s*-denominatives the verb and participle resemble those of the future. In *vanuṣyāti*, *uruṣyāti*, *svapasyāte*, *manasyāsi*, *taruṣyānt*, etc., there is essentially the same formation as in the future, save for the connecting vowel, and when this happens to be *i* the

<sup>1</sup> To the numbers given above must be added two occurrences of verbal futures from denominative stems for the Rig and five for the Atharva.

cases are equal, so that *stu* gives us *staviṣyāse*, *staviṣyāmāna* (A. V.); *taviṣy*, *taviṣyāte*, *taviṣyāmāna*.

Now the denominative participial adjective is generally (was perhaps always in the spoken language) accompanied with a pure verbal adjective of the same character, thus with *aṣvāyaté*, *aṣvayú*; with *avasyaté*, *avasyú*, etc. In like manner of the twenty-nine occurrences of future participles eleven are of participles by the side of which stand such verbal adjectives. The other participles, with the exception of *kariṣyánt*, occur once or twice only, but *aviṣyánt* and *saniṣyánt* respectively four and seven times, accompanied with the verbal adjectives *aviṣyú*, *saniṣyú*. Hence Grassmann reckons them both to denominative stems, assuming an *aviṣy* and a *saniṣy*. In my own opinion, who hold that the Sanskrit *s*-future is itself denominative, it makes no difference whether one connects *aviṣyánt* with *av* as a part of the verb or with *aviṣyú*, since I regard it as independent of either, but in discussing the matter here the form may be regarded (as in P. W., Whitney, Delbrück) as a participle.

I find the following participial forms:

*aviṣyánt* (-*án*, -*āntam*, -*até*) occurs four times, 1. 58. 2; 7. 3. 2; 10. 115. 6, all of Agni; 8. 51. 3—of Indra. Cf. *aviṣyā*, *aviṣyú*, used either absolutely=wishing to please, or intransitively=avens (loc.); does not take acc.

*asiṣyán* occurs once, 6. 3. 5: *sá id áste 'va prátidhād asiṣyán*, without object, 'Like a shooter wishing to shoot he set (the arrow)'—of Agni.

*kariṣyánt* (-*án*, -*atáh*) occurs seven times='wishing to do,' perhaps 'about to do.'

7. 20. 1: *cakrir ápo náryo yát kariṣyán*—of Indra.

9. 113. 1: *bálam dádhanā ātmāni kariṣyán vīryám*—of Indra.

6. 26. 3: *Atithigvāya śāṁśyaṁ kariṣyán*—of Indra (Soma?).

7. 19. 8: *Atithigvāya śāṁśyaṁ kariṣyán*—of Indra.

2. 24. 14: *Bráhmanaspāter abhavad yathāvaśāṁ satyó manyúr māhi kármā (ā) kariṣyatáh*—of Brahmanaspati.

4. 31. 9: *nahí . . te . . rādho varanta . . ná cāutnāni kariṣyatáh*—of Indra.

8. 62. 3: *pravācyam indra tát tava vīryāṇi kariṣyató, bhadrá indrasya rātāyaḥ*—of Indra.

*kṣeṣyántas* occurs once, 2. 4. 3: *Agnīṁ devāso mānuṣiṣu vikṣú priyām dhuh kṣeṣyánto ná mitrám*—of Agni: 'wishing to rest' or 'to remain,' no object.



*vi-dhakṣyánt* occurs once, 10. 16. 7: *nēt tvā . . dadhṛg vidhakṣyān paryaṅkhāyāte*—of Agni. 'Lest he envelop thee wishing to consume,' not necessarily with object.

*yakṣydmāṇam* (-ān) occurs twice, 1. 113. 9, agreeing with *mānuṣān*; 1. 125. 4, opposed to *ijāndm*. 'Thou wakest men to sacrifice'; (wealth comes) 'to him who has sacrificed or is about to sacrifice.' The latter is rejected by Grassmann on account of late expressions (praise of generosity).<sup>1</sup> The only middle future participle.

*vakṣyānti* occurs once, 6. 75. 3: *vakṣyānti 'vé 'd ā ganīganti kārṇam*. Last hymn in sixth book; the bow-string 'approaches like one that wishes to speak.' Grassmann 'late.'

*vayīṣyānt* occurs once, 7. 33. 12: *yamēna tatām paridhātṁ vayīṣyān* (cf. 9, *vāyantas*)—of Vasiṣṭha. Compare Grassmann, who rejects the whole hymn as late: "All, or at least all after the seventh verse is of later origin" (*sārvān* for *viṣvān*, expressions, Vasiṣṭha's praise, and position after Indra hymns). This verse describes Vasiṣṭha's divine birth.

*saniṣyānt* (-an, -antam, -antīnām), occurs seven times, compare *saniṣyū* both with and without object, like *saniṣyū*, and meaning 'wishing to obtain':

3. 2. 3: *ātyaṁ nā vājam saniṣyānn ūpa bruve*—of Agni.

3. 2. 4: *saniṣyāntaḥ* . . idem—of Agni.

3. 13. 2: *haviṣmantas tām īlate tām saniṣyāntō 'vase*—Agni.

7. 100. 1: *nā mārto dayate saniṣyān yō viṣṇave* . . *dāṣat* without object; compare (*mārtyas*) *saniṣyūs*—Viṣṇu.

9. 90. 1: *rātho nā vājam saniṣyān*—Soma.

10. 97. 8: *śuśmāḥ . . śṣadhīnām dhānam saniṣyāntīnām*. Physician's song, with praise of priest (22).

10. 99. 3: *svārṣātā pāri ṣadat saniṣyān*—of Indra. Without object. Grassmann rejects the whole hymn.

*sariṣyān* occurs twice, 4. 38. 6: *prathamāḥ sariṣyān niveveti*, 'wishing to get in first,' of a racehorse (*dadhikrāvan*, cf. Vd. St. p. 124).

2. 11. 7: *āraṁsta pārvataḥ cit sariṣyān*.

Der bewegliche berg hielt auch stille, Ludwig.

Der Wolkenberg auch jauchzte, Wasser strömend, Grassmann.

<sup>1</sup> I prefer another's statement here and below on this point, although in most of the instances the inference will not be disputed, I think, as the 'rejected' passages are obviously in form or matter late.

'The cloud paused, wishing to pour down,' finely describing the pause between the thunder and the rain's downpour. As in *sanīṣyān* the idea of wish, not of simple futurity, is prominent. It is a vivid picture of the succession of events in a thunderstorm; (7) 'it thundered, at the same instant it lightened (*vī samanā bhūmir aprathīṣṭa*), then the cloud waited, intending to descend; 8, down came the cloud,' etc.

*sūṣyantyāḥ* once, 5. 78. 5 accent! (gleichwie der Schooss) der kreissenden.

*hanīṣyān* once, 4. 18. 11: 'Then spoke Indra, wishing to kill Vṛtra'; active.

It will be noticed that the only case of future participle compounded with a preposition is in the tenth book; that the examples are from every book; that of the twenty-nine occurrences only four are found in passages which have been regarded as very late; and that of the two occurrences of the same middle future, both of which are in the first book, one is in a late *dāna-stuti*.

Turning now to the corresponding verbal forms, one finds first that *kṛ* (three occurrences), the participle of which occurs in books 2, 4, 6, 7, 8, 9, is found only in the first book, once in conjunction with a *bhū*-future:

*kariṣyāsi*, 1. 1. 6: *yād aṅgā dāṣṣe tvām āgne bhadraṁ kariṣyāsi*.

*kariṣyātha*, 1. 161. 2 (apparently late): Agni speaks to Sudhanvan's sons, the Ribhus. 'The gods said "make four (cups out of) one cup"; hence I came to you (to say this): O sons of Sudhanvan, if you will act in this way you will become equally worthy of receiving sacrifice with the gods.' *yādy evā kariṣyātha sākām devāir yajñyāso bhaviṣyatha*.

*kariṣyāti*, 1. 164. 39 ("gehört zu den spätesten stücken des R. V," Grassmann): *yās tān nā vēda kim ṛcā kariṣyāti*, i. e. 'what shall he do with the Rig-Veda who does not know that all the gods are included in (sit on) the syllable *om*?'

The second root represented by verb and participle is *vac*; the participle occurring in the sixth book, the verb once in the sixth book (in conjunction with the one occurrence of a (*man*) future middle of the first person), and once in the hymn of the first book, 162, most like 161, that in which was found *kariṣyātha*.

*vakṣyāmi*, *manīṣye*, 6. 9. 6: *kīm svid vakṣyāmi kīm u nā manīṣye*. Vs. 2 seems to indicate a later poet (so Grassmann):

*kāśya svit putrá ihā vākṣuāni paró vadāti dvareṇa pitrā*: 'what man's son will speak better (beyond) his father (who thus would be) inferior (to his son)?' Grassmann omits *dvareṇa* in translation, and Ludwig's 'ohne den untern gott, den vater,' needs a *Sāyana* to make itself intelligible; *dvara* is the result of *paró vadati*.

*pra-vakṣyāmaḥ*, 1. 162. 1: *yád vājino . . pravakṣyāmaḥ . . vīryāni*. These hymns, 162, 163, 164, are shown to be of late origin by their contents (Grassmann, who points out allusion to beast-sacrifice, metre, contractions, and late words as proof of this, and rejects all three).

As *kr* with seven participial occurrences gives three verbal forms, so *san* with seven occurrences of the participle gives two of the verb:

*saniṣyāsi*, 4. 20. 3, *saniṣyasi krátum*, to Indra.

*saniṣyati*, 5. 31. 11, *krátum*, to Indra. In regard to which I have only to observe that the formula expressed is the same, reminding the reader again of *saniṣyánt*, *saniṣyá*.

Of the two occurrences of *bhū*-future, one, *bhaviṣyátha* in 1. 161. 2, has been given above; the other occurs:

*bhaviṣyáti*, 10. 86. 7: *uvé amba sulābhike yáthe 'vā 'ṅá bhaviṣyáti*, followed by *hr̥ṣyati*, 7, as if future (Grassmann), from *hr̥ṣ*, rejected by Grassmann in toto, who remarks on vss. 6 and 7 that they seem parts of another hymn. It is the hymn containing the obscene dialogue between Indra and Indrāṇī. Cf. A. V. 20. 126. 7.

*janiṣyáte*, twice in the same formula, to Indra: *ná tvāvāñ anyó divyó ná pārlhivo ná jātó ná janiṣyate*, 7. 32. 23; *ná tvāvāñ indra káṣcaná jātó ná janiṣyate*, 1. 81. 5. Cf. A. V. 20. 121. 2.

*maniṣyé*, 6. 9. 6, see above, *vakṣyāmi*.

*staviṣyāmi*, 1. 44. 5, *tvām ahám (agne)*. The older usage (see below) was to employ the subj., as *stávā*, 2. 11. 6.

*staviṣyāse*, 8. 70. 14: *ṛṣibhiḥ staviṣyase*, used passively, of Indra, verse rejected by Grassmann on account of metre.

*jeṣyāmi*, 10. 34. 6, in the late song of the gambler.

In addition must be reckoned one *ábharīṣyat*, conditional, 2. 30. 2, in a rather doubtful passage so far as the sense goes, and the forms from secondary stems; of which there are *vāsaiṣyāse* occurring twice in the same formula, *yád góbhīr vāsaiṣyāse*, 9. 2. 4; 66. 13; and *dhārayiṣyāti (vígvañ bhūvanam)*, 4. 54. 4. In 1. 165. 9 and 4. 30. 23 is read *karīṣyā(h)*, a future subjunctive. The formula in the second passage is nearly that of the first, and

to my mind (perhaps prejudiced) appears to have been borrowed from the first, of which (1. 165) the epic tone sufficiently betrays its comparative lateness. My reason is mainly that the next verse, 4. 30. 23, is so out of keeping with the preceding as to have been rejected any way by Grassmann, thus leaving the twenty-third verse as the last of the hymn, in which position it could easily have been intruded. Moreover, verse twenty-two seems to be the real end of the song.

In the two lists above given the only future participle compounded with a preposition is in the tenth book; the only compound verb, in the first book, withal in a notoriously late passage.

If it be allowable to say that in general the first and tenth are later than the intermediate books, it will be of interest to compare the use of participle and verb from this point of view. The participle is represented by the intermediate books as much as by the first and last. So is the verb, to a certain extent, but if one associate with the cases found in the later books one passage which, although found in an earlier book, has been rejected for metrical reasons (other rejections it will be observed are also coincident with several of the cases in the later books marked late for the obvious reasons given above), and the one passage in which apparently a late poet is speaking, he will find that unsuspected verbal forms are represented with exceeding rarity in the body of the work. In fact, except for the much-discussed equivalent of a denominative to *saniṣyū*, the only case that remains is that of *jan*, and this occurs in a formula which meets us again in the first book.

Future stems in late books and late or suspected passages :

1st book : *kr*, three times (once in a passage of palpably late content, once in a passage already rejected by Grassmann).

*jan*, once (same formula as that in the seventh book).

*pra-vac*, once, in a passage rejected by Grassmann (corresponding participle also in a rejected passage).

*stu*, once (see eighth book, below).

1st and 10th books : *bhū*, twice (once in a rejected passage in the tenth book, once, see *kariṣyatha* above, in a passage apparently late).

10th book : *ji*, once, in late gambler's song.

8th book : *stu*, once (passage rejected on account of metre).

Future stems in earlier books and unsuspected passages :

4th and 5th books : *san* (once in each book in same formula. Compare *saniṣyū*, and Grassmann's *saniṣy*).

6th book: *vac* and *man* (once each in same verse).

7th book: *jan*, once (same formula as in first book).

It seems to me that no exception can be taken to this division. On the contrary, a more pressing critique might insist that the forms *vac* and *man* occurring together in a hymn apparently sung by a later poet should be put in the first division, and even claim that it was doubtful whether the formula embracing *janīṣyāte* in the first book should not cast doubt on the antiquity of that in the seventh, thus leaving for the earlier books of the Rig-Veda as the only unsuspecting future stem *sanīṣya*.

Apart from the verisimilitude of such critique, however, it is of course not my intention to call in question the possibility of the existence of any of the above future-stems at the period represented by books II-IX (if there be such a period), but simply to show with this grouping how few are the verbal forms in what is reckoned the early part of the Rig-Veda. The number of those cases called late ought properly to be increased by the addition of the future subjunctive, the one conditional, and the causals, for when it is remembered that in no Vedic text is extant any other case of a conditional than this in the Rig-Veda (its province is the Brāhmaṇas), and that of the one hundred and fifty causals in the Rig-Veda only two make futures,<sup>1</sup> while the closely related denominatives give no future till a later period, it becomes clear that the text here contains forms that stand near to the Brahmanic period, where such forms flourish, and not to an earlier period—for the latter view would assume a sporadic appearance in early times, a sudden and complete cessation, and a later disconnected growth, while the former gives an historical continuance to the whole, with unbroken connection from the first to the last period. The same is true of the isolated subjunctive.

Admitted that *vakṣyāmi*, *bhaviṣyāmi*, and any other of the roots above mentioned may have pre-existed as futures in verbal form although not found as such till the later hymns, it still remains a curious phenomenon that so very few verbal forms are represented in that literature's future-system—*jan*, *san*, *vac*, and *man* alone exempt from distrust on account of their position, and of these only *san* absolutely untouched by suspicion of lateness.<sup>2</sup>

<sup>1</sup> Whitney, Gr. 941, 1050.

<sup>2</sup> As for the form *manīṣyē* (occurring here and in one other passage: *mddhu manīṣyē*, *mddhu janīṣyē*, *mddhu vakṣyāmi*, *mddhu vadīṣyāmi*, TS. iii. 3. 2<sup>3</sup>; TA. iv. 1<sup>1</sup>; ÇS. 1. 6. 9) compared with Brahmanic *maṇsyāte* (TS. iii. 1. 9<sup>8</sup> and ÇB.), although



## PART III.—THE INDO-IRANIC FUTURE.

As one looks up the pyramid of Sanskrit *sy*-futures he is forced to ask the question whether with the means of going higher than the Veda he would not discover that he had reached the apex of

the latter is the type of most frequent occurrence in the period from the Rig-Veda until the Epic, yet a statistical comparison will scarcely lead to any inference of more than theoretical priority for one or the other. The general facts in regard to the use of *sy*, *iṣy*-forms are, however, in themselves not void of interest. In the first place most of the Rig-Veda future-stems are not at any time alterable or the equivalent is late (of *sy* to *iṣy*, *jeṣy*, B. *jaiṣy*; *dhakṣy*, Epic, *dahiṣy*; *sūṣy* R. V. and C! *soṣy* B., *saviṣy* Epic; and of *iṣy* to *sy*, *janīṣy*, Epic *jāsy*; *maṇīṣy*, B. *maṇsy*; *staviṣy*, B. *stoṣy*; *haniṣy*, Ep. *haṇsy*); then, in the Brahmanic period while a few roots, e. g. *jeṣy* R. V. and *neṣy* A. V., are represented by *jaiṣy*, *naiṣy*, yet on the other hand, besides the changes above, *svapiṣy*, A. V., appears in B. as *svapsy*, and even side by side stand *eṣy*, *ayiṣy*; *drapsy* ÇB., *darpiṣy* JB.; *soṣy*, *saviṣy*; *kraṇsy* Vedic, and B. *kraṇsy*, *kramīṣy*; and such reversions, if one may call them so, extend into the Sūtra period, of the new future-stems *hvasy* representing B. *hvaṣy*; or even later, Epic *kṣaṇsy*, B. *kṣamiṣy*; Epic *vetṣy*, B. *vediṣy*; Epic *ceṣy*, B. *çaiṣy*. After this *iṣy* scarcely changes to *sy*, but *tyakṣy* and *tyajīṣy*, *sakṣy* and *sahīṣy* are still Epic confreres. Generally, however, there are about nine cases, *sy* became *iṣy* in the Epic future. It is thus seen that so far as the forms go the usage of the Rig-Veda, whether one takes future stems of verbal forms alone, or of verbs and participles together, conforms neither to that of the A. V. nor to that of the Brāhmaṇas, but to that of the Epic. The proportion of *sy*-stems, verbs and ptc., to *iṣy*-stems being in all in R. V. 6 : 12; in A. V. in all 21 : 14; in the Brāhmaṇas of new future stems (sometimes both forms on one stem) circa 77 : 53; in the Sūtras do. 6 : 5; in the Epic do. 14 : 41; in C., 5 : 16. In R. V. and A. V., separating verb and participle and comparing precisely, R. V. has *sy* 2 verbs, 4 more ptc.; *iṣy*, 7 verbs and 5 more ptc.; while A. V. has *sy* 13 verbs, 8 more ptc.; *iṣy* (Index caret *janiṣyate*, 20. 121. 2), 14 verbs (no more ptc.; for in A. V., except in the case of *i*, no future ptc. stem in *sy* is identical with a future verb, while all future ptc. in *iṣy* are coincident). As regards the form of new futures the Sūtra period represents an equilibrium between the A. V. and Brahmanic period on the one hand, where, roughly speaking, about two-thirds of the new future stems are made with *sy*, and the Epic on the other, where about one-third are so made (excluding, of course, secondary stems). The R. V. future stems are then in so far remarkable as that their preponderating formation in *iṣy* agrees with that of a much later period of the language. From a comparative point of view *sy* is the older form. Apropos of *maṇīṣyē*, *maṇsyāte* it may not be otiose to remark that the special form *taniṣyāti*, which comparative philologists (Brugmann, Gr. Gr.<sup>2</sup> §140) equate with \**τεν-ε-στω*, does not really exist. The only form of the future of *tan* with which philology is strictly entitled to operate is *taṇsyāte*, although as a theoretical analogue *-iṣyāti* is unobjectionable.

*sy*-forms, or that at most a still diminishing line of participles remained. At this inquiry some scholars would in turn force upon him the reply that the *sy*-future is the prototype, from which was derived the *s*-future and which was originally common to all the Aryans. Before theorizing, for, as Brugmann said, a decade back, this answer contains an 'unbewiesenes' dogma (M. U. III 63), the facts must be examined, but examined without prejudgment based, consciously or not, on *a priori* theory.

The Iranian future is made like the Vedic in *sy*. But nearly all the forms are participles (adjectives), which appear to have a desiderative meaning. The future is regularly expressed by the subjunctive. Nothing could agree better with the state of things found in the Rig-Veda. And there is another form with the function of future than that in *sy*. On the theory that *s*-futures cannot have existed, these forms in *s* instead of *sy*, formerly called futures, are now relegated to the subjunctive aorist.<sup>1</sup>

Yet no subjunctive meaning is claimed for these forms. They are simply future in sense. Relegated, however, they must be to the subjunctive—why? Because there is an 'unbewiesenes' dogma that the Aryan future is different to that of the Greek.

I shall not quarrel on a question of terminology such as I believe this to be. It is sufficient for the purpose of my paper to emphasize the fact that forms in *s* with future meaning, i. e. to all intent and purpose futures in *s* are found in Iranian, and that the same specially participial province as in the Rig-Veda is recognized for the Iranian future in *sy*.

If it be true that the *sy*-future is a development from denominative participial adjectives one may expect to find some traces of other future formation. But it must be granted that in the writing of the texts there would be with the gradual growth of the *sy*-future a temptation to change such ancient *s*-futures as may have existed by the addition of a single letter in the popular form. How many such cases have occurred we cannot tell. Are there any traces of such *s*-futures extant?

The form *sākṣé*, on the basis of the best manuscript authority, has long been recognized and received into the Atharvan text (A. V. 2. 27. 5). Now that the Index is at hand it appears that it

<sup>1</sup>"Die einfachste und sicherste Erklärung für alle Formen welche aus der Wurzel + *sa* bestehen und futurische Bedeutung haben ist die als Conjunctive des Aorists," Bartholomae, *Verbum*, p. 127. For the statements made above compare ib. p. 127, 240-1; §229; *Handbuch*, §281; Jackson, *Grammar*, §669 ff.

is not an isolated future. Side by side with it, also supported by the authority of the MSS, stands *mekṣāmi* (7. 102. 1).<sup>1</sup>

To regard these forms as merely due to clerical errors is, as Bartholomae says, 'the easiest and safest' way of escaping the evidence of the manuscripts. Whitney, however, seems to give a reluctant consent to a view the conservatism of which must not be judged by theories, and says (Index, p. 382): "*sākṣe* has been treated as if *sākṣye* (fut.)." That with the forms *grōṣamāna* . . . *dhīṣamāna* of the Rig-Veda, the future which Bloomfield edits as *\*vi-bhuñkṣyamāna*, and which stands in the MSS at each occurrence as *vi-bhunkṣamāna*, with all due conservatism may at least be tentatively compared no one will deny.<sup>2</sup>

It was seen above that the strong stem of the *sy*-future was not universal; in Avestan *būšyant* is found the same more primitive type that is shown in *sūšyant*. The close connection between aoristic and future formations is paralleled by a like correspondence in the forms *yūṣam*, *yoṣam*, *prkṣase*. It is not impossible, therefore, that, granting the well-authorized forms *mekṣāmi* and *sākṣé* as indicative of an *s*-future, in such a future there would also be traces of an original weak stem in the middle corresponding to *āstrṣi*, *ānūsi*, presumably older forms of the aorist (Grammar, 884, 887). There is indeed a *kṛṣe* in rather a late passage, 10. 49. 7, in a sense that warrants Whitney's interpretation as a present (Gr. §894).

But other root-forms of this *se*-group are in form still more primitive (for they have the vowel unlengthened) than *ānūsi*, while their meaning is more evidently future. Their preservation may well be explained by the collected meaning. They are all (with the exception of *kṛse*) antique formulae of devotion, expressing the act of worship; to praise, sing, adorn a hymn being their general signification. Again, they usually stand near the beginning, with the hymn before them (some interesting exceptions are explained in the note below), so that the future meaning is not forced upon them. They correspond to the few cases of *sy*-future in the <sup>2</sup>like case noted above—*pravakṣyāmas*, etc. As for their form, it has never been explained in any satisfactory

<sup>1</sup> The *vi-dhakṣdn* of 18. 2. 58=R. V. x. 16. 7 is now (note the participial form) corrected to *dhakṣydn*. The form *yokṣe*, 19. 13. 1, though given by the manuscripts, leaves the text metrically imperfect.

<sup>2</sup> *Vi-bhuñkṣamāna*, Kāuṣ. S. 23. 9; 38. 26 (in the first passage K (Kielhorn's MS); in the second, all the MSS).

manner. I venture, therefore, to suggest that they correspond to *ἀείσομαι μῆσομαι* at the beginning of Homeric hymns. By anticipation I should add that in the view of the origin of the future here advocated, although I have shown above a half resemblance to aoristic formation, it makes no difference whether these forms be regarded as analogous to aorists or as made independently by affixing an *s* with indicative endings to root or to stem.<sup>1</sup>

<sup>1</sup> The form *stuṣṣé* occurs (not inf.) 19-21 times; *gāyise* and *punīṣṣé* once each; *grñīṣṣé* about a dozen times; *ṛñjase* half a dozen (*ṛñjdse* 2d pers.) and sporadically the less frequent words *arcase yajase, hiṣe ohiṣe*. Compare the following: in 1. 186. (1 and 2 the gods shall come hither), 3, I will sing Agni (*grñīṣṣe*), last verse, 'this is my song'; 2. 20. 4, 'we will further you, Indra,' then *tām u stuṣṣa indram tām grñīṣe*, cf. *grñe stuṣe*, 8. 23. 7; 6. 44 (1-3 'great art thou, Indra') 4, I will sing Indra (*grñīṣṣé*, cf. *upāstrñīṣṣṇi* in 6), 7 ff. Indra's deeds recounted (*avidat*, etc.) for 18 vss.; 7. 6 (1 *vdnde*, 2 *vivāse*, like form) 4, *grñīṣṣé Ag.*, 7 vss.; 7. 66. 7 (19 vss.); 7. 97. 3 (10 vss.); 10. 122. 1. When a hymn is to all the gods the word may be found later, yet cf. 7. 34. 16 *dhīm grñīṣe*; after others have been praised the poet begins with a new subject (25 vss. in all). So in 2. 33. 12, the hymn begins with impv. and opt. to Rudra, in 11 begins again with *stutī grūdam . . mṛtā* 12, *pratinānāma . . dātāram . . grñīṣe*, 'I want what father Manu got,' etc., with three more vss. of laudation. In 5. 34. 9 *grñīṣe* occurs for the only time in a last vs. to gods without a song following, but 1-8 are *jag.* to Indra; 9 (last) *ṛṣṭubh* to Agniveçi Çatri, an after-piece. *Gāyise*, 7. 96. 1: *bṛhdd u gāyise vdaḥ*. *Punīṣṣé*, 7. 85. 1: *punīṣe vām . . manīṣām . . sōman jūhvāt* ('while getting this soma ready I will sing you a song'), 5 vss., last 'may this my song reach you.' In 4. 8. 1 (*agnīm*) *ṛñjase girā*, 8 vss.; so 6. 15. 1 and 4 (20 vss.); 10. 76. 1 (8 vss. to stones). In 5. 13. 6 (last vs.) not the god but *rādhas* is object, as a result of the song *ā rādhaḥ citrām ṛñjase*. In 8. 5. 3, the poet cries out, 'Your praises have been seen (by me) and I will extol you' (*prdti stomā adṛkṣata vācam ohiṣe*), which he does in thirty-odd verses (here *stuṣṣé* follows; inf., unless *kaṇvāso* be voc. In 7. 7. 1, *prā devdm hiṣe ndmobhis*. The same formation on developed stem with like application in *arcase* 10. 64. 3 (1-4, 'how shall we worship (subj.), I will sing (*arcase*) with what voice is he extolled,' *vāvṛdhate*), . . end, *dstāvi*; and in *yajase* 8. 25. 1 (it will be noticed that most of the forms occur in bks. 2-7). It is unnecessary to give more than the normal use in *stuṣṣé*: 1. 46. 1, *uṣā vyūcchati . . stuṣṣé vām aṣvinā bṛhāt*; 1. 159. 1, *dyāus* and *prthivī stuṣṣe*, etc. As above with all-gods and *rādhas* united 1. 122. 8 *asyā stuṣṣe rādhas* (7, *stuṣṣé . . rātis*, inf.); 2. 20. 4 (v. *grñīṣe*); 2. 31. 5 (all-gods, 7 vss. change of subject) 5. 33. 6 (*stuṣṣe dānam*); 5. 58. 1, 6. 21. 2 (12 vss.) normal; 6. 48. 14 (interesting case, 1-10 to Agni, 11 exhortation to sing, cf. 2. 31. 5), 22 vss.; 6. 49. 1; 51. 3; 62. 1, all normal; 8. 7. 32 (cf. 8. 5. 4) monstrous exception or inf.; 8. 21. 9 (18 vss. neutral as to argument); 8. 23. 2, 7 (30 vss., normal); 8. 24. 1 (or inf. ?); 74. 1; 84. 1, all normal; 8. 65. 5 (cf. above 2. 20. 4); cf. 3, *ā tvā . . huvé*, 4, *ā ta indra mahimānam hārayo deva te mahāḥ . . vahantu bībhṛataḥ*, 5, *indra grñīṣṣé u stuṣṣé* (2d pers. or read *indram*, see next). *Cdrkrṣṣe*, intensive, 3 sg., see P. W.; all in

But in saying that *stuṣé* (*sūṣyant*), *mekṣāmi*, *staviṣyāti* seem to me to be equally future, I must explain what I mean by the word. If, as seems probable, *mṛkṣā* (*mṛj* or *mṛc*, Avest. *marc*) is the phonetic equivalent of *marekṣ-aite*, and one finds a number of roots, as Whitney points out (Gr. 108), which increased by an *s* become desiderative (see the whole list, Roots, p. 247)—suffice to note *bhū + s*, *bhūṣati*, R. V.; *hā + s*, *hāsante* 'go emulously' (A. V. 4. 36. 5, Roots, p. 204)—if the future verb in Iranian and Veda, as was noticed above, and by Delbrück, S. F. iii. 8; iv. 99, marks intention as well as temporal posteriority (I think without bias a difference may be detected between the earlier and later examples in the list above from the Rig-Veda), then it is almost imperative to connect with this desiderative *s* and future the reduplicated *s*-future known as the desiderative. Therefore, as it seems to me, it is not exact to speak of future tense, meaning thereby a tense marking a coming action, but of a desiderative tense, more or less strongly expressed. As for the desiderative proper with which Zimmer has wished to identify the Keltic reduplicated future (K. Z. xxx. 128), it may, conversely, be called either a strong desiderative or a strong 'future,' but in that case 'future' must, as in the simple future, be synonymous with will-tense. In respect of all these forms there appears to me to be only one solution possible: To a root or to a stem (strengthened or not) may be added an *s* which denotes desideration. It may be added explanatorily that when strengthened by reduplication this strength augments the force of the whole form, as ordinary reduplication augments the force of the simple root in presents (perfects, etc.).<sup>1</sup> That in the pre-Vedic period the participle in *sy* gives rise to the non-primitive *sy*-future is, indeed, not proved, but rendered likely by the use of participial and verbal forms in the Rig-Veda; by the fact that

10th book, where, as perhaps 10. 93. 9, *stuṣé*, the sense of the form as 1st sg. is lost and, with the inf. use keeping it from dying out, it is used irregularly for 3d sg., like *gr̥ṇé*, 1st or 3d person. *Kṛṇe*, 10. 49. 7, see above and cf. 8. 3. 20; 32. 3, same as above (?). List in Delbrück, *Verbum*, pp. 29, 181. Accents above from the text.

<sup>1</sup> That the perfect was primarily a special form of the present is shown by the Vedic meaning, by the same meaning surviving in certain well known Greek, Latin and German forms (=present), and by such present-perfect forms as *yuyōjate*, *būbodhati*, which are respectively present and present-future. That the reduplication was, as in the case of desideratives, merely a strengthening of an unreduplicated present is shown by unreduplicated 'perfects,' such as *véda*. To assume the loss of reduplication here is to theorize against facts.



active future<sup>2</sup> participles show *sy* alone, whereas simple verbal forms show both *sy* and *s*, certainly in Avestan and perhaps in the Veda; and by the fact that the only future form existing in Slavic is a participle. Conversely, if this hypothesis be rejected, one has to assume, on resubstituting *sy* as the original type, that *tāsya* > *τοιο* and *dāsyāmi* > *δώσω*, whereas, with the hypothesis that *s* is original and *sy* a special development of Slavic-Indic-Iranic, no phonetic law is violated.<sup>1</sup> That, however, by the side of a desiderative *s* should stand an *s* which, like the former, makes verbal forms but has not the same desiderative force seems impossible. The *s*-future must, therefore, have been identical in sigmatic origin with the *s*-aorist, yet this in the indicative, perhaps on account of the presence beside it of an unsibilant aorist, lost its peculiar character at an earlier date than did the future, which was itself rapidly losing such force in the earliest Greek and Vedic literature (Greek future participles still like Sk. and Avest. participles have a desiderative force, see Delbrück, loc. cit.). I am not aware, however, that it has ever been shown that there is

<sup>1</sup> The reader will think it high time I alluded to Johansson. The idea given above first occurred to me some time ago on correlating the A. V. forms with *stuṣé* and with the desiderative *s* in *hā-s*. I found on examining into the literature on the subject that I had been in part anticipated by the third excursus in Johansson (De derivatis verbis contractis linguae graecae, 1886), to whom, therefore, the combinations of *s* as illustrated by root, future, etc. (excepting examples in Avest. and A. V.), are of course to be referred. There is, however, or was from the beginning, in my mind a different interpretation of this *s* than that given by Johansson. The latter sees in it, if I rightly understand him, a sign the force of which he strives to show is not confined to the future, but may express the present, and which is to be connected (the old opinion) with the *s* of neuters, and so with denominatives. The reduplicated aorist is to him *a-nam + s + is + am = e + τελε + σ + σ + α* (without connecting vowel). *jīvdse*, legere, *stuṣé* (inf.), *λῦσαι*, dare, fore, are all 'formae variatae stirpis primigeniae -s.' Comparing *s* in Lat. pres. and Greek aorist Johansson continues: "verisimillimum puto hanc divisionem vel dispositionem formarum cum usu quodam praesentico vel potius a principio indefinito stirpis *s*, unde postea et praes. et aorist. profecta sint cohaerere." J. compares *arcase*, etc., to show present sense, and p. 210 alludes to *stuṣé* 'notione praes.', arguing for an old present sense in *s*-aorist. The Doric future, in distinction from Brugmann's explanation, is derived by J. from the *siḡ*-aorist. In a word, I have followed Johansson in comparison of *s*-forms, but the use we make of them is not the same. He claims an indefinite *s* and gives it a wider application than I should venture to do, for he regards aorist, future, inf., noun, denominative, and simple root as built by the same *s*, to which he gives a 'present or rather indefinite' character.

not a difference even in the aoristic use, though I have been unable to trace any in some examples selected for examination in the Rig-Veda.

The special Eastern form of the future was developed, as it seems to me, after the period of westward emigration was past, perhaps by direct analogy with denominatives or by passing itself through a denominative stage, in India beginning with the 'participle' adjective, or noun and adjective, then influenced by formations like *aviśyānt*. The ending *yu*, an adjective-former very common in Sanskrit, is used quite independently in the R. V. (e. g. *yuvayū* 'desiring you both,' *varāhayūḥ gṛhā* 'the dog seeking the boar'). It is found in Iranic, where it is identical with Sk. (e. g. Sk. *dāsyu*=Ir. *dahyu*), and is one of the most common endings in Slavic (Lithuanian); yet *scarcely a trace of it remains* in other Aryan languages. The details are worth noting. Very few examples of *yu* exist in Gothic, none in Latin, none in Celtic, no sure case in Armenian; and *viv* alone in Greek stands certain. That is, the languages where *sy*-futures appear are those where *yu*-suffix is common. In connection with this it is to be noted that the ending *nu* is almost as rare in Greek as is that in *yu*, and that the only languages that have *s-nu* are Indo-Iranic-Slavic (Lithuanian).<sup>1</sup>

The commonest consonantal denominative formation in Sanskrit is from neuter nouns in *s*, as typical of which may serve *nāmas*, *namasyānti*, *āvas*, *avasyānt* (see the list above, and compare Whitney, Gr. 1064). Two points have been made clear above, one that *avasyānt*, *avasyū* is norm of a common parallel; one that participial denominatives may precede verbal forms of corresponding kind, and possibly other participles as well.<sup>2</sup>

<sup>1</sup> Sanskrit *kraviṣṇū*, *jīṣṇū*, etc., Lithuanian *doosnūs* (*dā*) 'liberal.' Compare Brugmann, Gdr. ii. p. 300-302; Gr. Gr. §70b 2.

<sup>2</sup> I trust it will not be considered a case of *καὶ τὸν ἀπὸ γραμμῶς κινεῖ λίθον* if I add some very modern illustrations of verbs developed from (virtual) participles. One says 'a homing pigeon,' but there is no verb 'to home.' There is no verb 'to thunderstorm,' but 'is thunderstorming' is not unusual. In New England, where new forms are daily making, I have always heard *glanging*, yet never as a verb (*glanging* is from 'go-along-ing,' participial formation from imperative + adv. + ing). The participle is common ('he was glanging along,' etc.) and used as an equivalent of urging (a horse). Only in the pseudo-dialect of stories have I seen *glanged* written immediately after *glanging*, and I doubt if Miss Wilkins, who gives us the form, ever really heard the verb. Used chiefly (originally?) as participles (not gerunds) are also wheeling = bicycling, bobbing = sledding, lowering, kiting. Compare Sk. *phullant*, without verbal forms, from *phulla*, 'blooming.'

The attempt below to trace the origin of this future is of course based on the only surviving historical material; hence, while perhaps explaining the Indian development, it must be held only to indicate a possible parallel in the two other languages knowing an *sy*-future. The Lithuanian future may have developed on the same lines, as would be rather implied by the fact that in Slavic proper the only form of the *sy*-future is one participle. There was then the parallel formations, *avas*, *avasyú*, *avasyánt*; the adjective standing sometimes in the form *-a*, as in *tárus*, *táruša*, *taruśyánt*, and the connection extended by verbal abstract nouns, as in *ápas*, *apasia*, *apasyā*, *apasyú* (vb. *apasyāt*), *vācas*, *vacasā*, *vacasyā*, *vacasyú* (vb. *vacasyāte*). It is not difficult to see how from a root *san* with a denominative *sanisyú*, *sanisyánt* (adj.) on the one side, and the future ptc. *\*sañsant* on the other, with the many verbal forms employing *i* as connecting vowel, we should first get *\*sanisant* and then, by analogy with denominatives in *\*syant*, *sanisyánt*, or from a root capable of adding the desiderative *s* direct, *su*, *\*sūśant*, *sūśyant*,<sup>1</sup> to which still remains the intermediate *sūśā*. Since the obsolescent *yu*<sup>2</sup> of the Vedic period (Whitney, Gr. 1178) is passing away even in denominatives, it is not surprising to find it disappearing in the combination *s + yu*. The accent of the future in its new (genuine or imitated) denominative form is, like that of the pure denominatives, on the stem, but it is possible that *sūśyantī* may really represent the older root-accent, in which case it would be a question whether we should not refer *dhákṣant* *sákṣant*, *arṣānā* (but denom. fut. *dhakṣyánt*) to future rather than to aorist, or, still more correctly, term them timeless desideratives without specific tense (cf. *īpsant*).<sup>3</sup> The strongly marked desiderative character of the formal denominatives raises the question (see Johansson) whether the same *s* as that of the future is not in *māna-s*, *nāma-s*, and if so, can *manis* in *manis-ya* = *mañs-ya* be regarded as from a neuter in *is*. A comparison of such nouns with the futures of their roots will, however, scarcely show this—we have *stavisyánt*, *stosyánt*,

<sup>1</sup> Compare R. V. *irasyā*, *irasyāti*, A. V. *īṛṣyā*, *īṛṣyū*; ptc. TS. *īṛṣyánt*.

<sup>2</sup> That this adjective ending *yu*, which is almost peculiarly Slavic-Indiranian, may in turn have arisen from *y + u* (cf. *ji-jay-*, *jay-ús*) is not improbable (see Brugmann, loc. cit.), but such formation antecedent to the *yu*-ending which is found regarded as complete in itself (*tvā-yū*, *yuva-yū*) does not affect the present question.

<sup>3</sup> These so-called aorist participles have no aorist sense. Delbrück, Syntax, p. 381. Compare Avest. 'aor.' ptc. from *van*, Yt. 13. 155, plainly future.

but no *stavis*; *havis*, but no \**haviṣyānt*, etc. Compare the whole list below.<sup>1</sup> Tempting as it would be, therefore, to set up \**manis*=*manas* (cf. °*ta*, °*ila* adj.), \**sanis*, \**janis*, etc., after Grassmann (analogous to *vapus-yānt*, *taruṣyānt*), it seems more probable that the *s* of *sanīṣya* and *man-i-ṣya* is the same as in *maṇsya* (= *√*+*s*, not *manis*), compare *mānava-ṣ-yānt*. I add, what seem to me also illustrative of the Vedic *s*-‘future,’ a few examples of futureless *s*-roots which are reckoned as presents (the list is easily increased; ‘no ft.’ means none in literature): *srāṇsate* (no ft.); *dhvaṇsati* (no ft.); *nīṇsate* (no ft.); *dharṣati* (*dhṛṣānt*, cf. *dhṛṣṇu*, °*ṇōti*; no ft., and no ft. to *dhṛ* till Epic *dharīṣyati*); *rakṣ*, *ṣaṇs*, *hīṇs* (no fts. till B.); *bhreṣati*=*bhraṇṣate*, etc.; secondary; *daṇṣāyas*, *taṇṣāyati* (no fts.).<sup>2</sup> To recapitulate: desiderative *s* makes *srāṇsate*, desiderative *s+y* makes *maṇsyāte*. The *y* has come by analogy with *manasyānt*, or like it through denominatives (*sūṣā*, \**suṣyā*, *sūṣyanti*)—direct by analogy being the more probable. Perhaps the simplest explanation is after all this, that roots in *s* have a predilection for the *y*-conjugation, so that the tendency of the language as well as analogy with *manasyé*, etc., conduces to the transformation of a desiderative present \**saṇsati* first into \**saṇsyati*, then (like *maṇs*, *maṇīṣyā*) into *sanīṣyāti*. Compare *pluṣ*, *plóṣati*, Lex. *pluṣyati*; *ruṣ*, R. V. *róṣati*, Ep. *ruṣyati*; R. V. *ghóṣate*, C. *ghuṣyant* (also C. *dūṣyant* ptc. against *duṣyati*); R. V. *átviṣanta*, C. *tviṣyant*; R. V. *trásanti*, Epic *tra-syati*. Compare also *ásyati*, *iṣyati*, *jasyata* (pret.), *tṛṣyati*, *túṣyati* (S., *toṣy*, Ep.), *pīsyati* (sic; for *pīṇsyati* ?), *púṣyati*, *mṛṣyate*, *yásyati*, *riṣyati*, *ṣúṣyati*, *ḥṣyati*, etc., accent stereotyped to distinguish from passive. But there is an ‘uncertain form’ (P. W.) from *bhikṣā*, viz. *bhikṣyāti* which is, as compared with *bhikṣate*, analogous to the ‘present’ *bhartsyāmi* (though this A. V. form is questionable, Index, p. 382) and presupposes \**bhikṣyā*, \**bhikṣyānt* as noun and adjective. The stages of change would be represented by \**sáṇsant*, \**saṇsati* with adjectives *sanīṣyú*, *sanīṣ-yānt*; \**sāṇsyati*, *sanīṣyāti*. Both ‘future’ and ‘desiderative pres-

<sup>1</sup>*Arctis*, but no *arciṣyāti* till C.; *kravts*, but no verb; *chadts*, *barhts*, but no ft. to *chad*, *bṛh*; *rocis*, no *rocīsyānt* till Epic; *vartts*, but *vartīsyānt* till Epic *var-tīsyānt*; *ḡocis*, but no ft. till Epic *ḡocīsyānt*; *sarṣts*, but only ft. in *sy*; *havis*, but only *haviṣyānt*; (*jyótis*, no ft., *jyut*). See nouns in Lindner, Nom. §28. Conversely, there is no *tavis* to *tavás*, *taviṣā*, *taviṣi*, *taviṣyā*, *taviṣyānt* (*taviṣy*).

<sup>2</sup>Of roots with obvious increase by means of *s* I have noted *kam kāṇkṣ*, *bhāj bhakṣ bhikṣ*, *bhū bhūṣ*, *bhā bhās*, *bhī bhīyas*; *muc*, *mokṣ*, *rā rās*, *ṣak ṣikṣ*, *ḡā*, *ḡās ḡaṇs*, *ḡru ḡroṣ*, *han hīṇs*, *hā hās*; perhaps *taṇs* and *carṣ*: *dāsyati* with *dāsyu* is doubtful.

ent' are simply desideratives employed to indicate future (will for shall). Possible parallels: Avestan *varešaite* beside *vakhšyeite*, Vedic *hāstate* beside *hāsyāte*; A. V. *sākṣé*; R. V. *stuṣé*=B. *stoṣyé* (old and late root); *dhāksant*, *dhakṣyānt* (?). In agreement with what was seen in the case of denominatives the new future in *syant* began with adj. ptc. formations and thence by analogy was extended to the verbal forms, giving in Slavic one form and that a participle; in Avestan chiefly participles, verbals in *sy* and *s*, but participles in *sy* alone; in R. V. *syant* common, *syati* and other verbals rare and late. There are in R. V. more than two and a half times as many occurrences of *stuṣé* and such forms as of all the verbal futures in *sy* put together.<sup>1</sup>

#### PART IV.—THE SIGMATIC FUTURE.

Granted any truth in the view expressed above, the position of the Aryan sigmatic future has been changed. If an inkling of doubt attach to priority of *sy*-futures in Indiranian the ground is taken away on which rested the priority of *sy* for the Aryan future. It is no longer an *unbewiesenes*, it is an improbable dogma. It will not be necessary to show that *παξέω* might have come from *sy*, but to show that it must. For, outside of Greece, where is the West-European future identical with an *sy*-future? It is, indeed, surprising on how narrow a foundation has been built the hypothesis of original *sy*. It is not, however, simply in order to emphasize the statement that *s* and not *sy* is the sigmatic future in other languages that I group below the well-known facts in regard to this point, but to call attention to another point quite as well known but little used in the discussion of the primitive future. The reader will please observe in *what way the idea* of the future is most universally expressed by the Aryan nations, East and West, remembering at the same time that the future in *sy* and in *s* has been declared by Delbrück and Bartholomae to have in Sanskrit, Greek and Avestan a sense not always simply temporal, but sometimes expressing intent.<sup>2</sup>

<sup>1</sup> Perhaps some of the *dhātupāṭha*-forms like *jeṣate* may be survivals of the same sort. The offensiveness of *grñīṣé* as future is, I admit, greater even than that of *stuṣé* from the point of view of a completed grammatical system. Compare the ft. *aṣṇuvisyāmahe* in ÇB, which is also offensive, but not on that account non-existent as a future.

<sup>2</sup> Compare in Lithuanian the use of future as stated by Schleicher, Lit. Gr. p. 309. For the minatory force of the Sk. future cf. Whitney, Gr. §948.



Future idea expressed by indicative *sy*-form (possibly *s*-form) and subjunctive.

*Sanskrit*: *sy*, the common form (participles prior to verbs originally?) (a Vedic *s*-form, possible). The subjunctive has, according to Delbrück (Syntax, p. 309) a sense sometimes 'approaching that of the future,' or (ib. p. 313) 'near the future,' or (ib. p. 318) 'contains a future sense.'

*Avestan*: *sy*, rare in verbal, common in participial form (participles prior to verbs?) (*s*-form, in verbs alone probable). The subjunctive has, according to Bartholomae, the function of a future: "Indicative forms of the future occur very seldom in our [Iranian] texts; for the most part the future is expressed by the subjunctive, more seldom by the present" (Verb, p. 240).

Indicative *sy*-form and indicative without sigmatic form.

*Slavic*: *sy* the regular form of future in Lithuanian (*siu*, *lipsiu*, *liksiu*). *Sy* exists only as one participle in Slavic proper (*byše*.) The present indicative is regularly used to give the future idea in all Slavic dialects.<sup>1</sup> Lithuanian *si* from *s* (?).

N. B. In Sanskrit and Avestan *yu* adjectives and *sy* future; in Lith. *siu* future and more *yu* adjectives than in any other Aryan language (Brugmann, Grnd. ii. p. 301).

Indicative (auxiliaries) and no sigmatic future.

*Gothic*: The future is expressed by the present indicative or by auxiliary verbs.<sup>2</sup>

Indicative (auxiliary), subjunctive (*s*).

*Latin*: Auxiliary *bo* (new form?). Subjunctive, *dicam*; *ero* (*eso*) (used as future indicatives). *s*-aorist subjunctive, *axo*, *faxo* ('*si ita faxitis vestrae res meliores erunt*').

<sup>1</sup>As substitute for future the present of the so-called perfect verbs is used (Leskien, Handbuch, p. 149). Compare Miklosich, Gr. pp. 176, 200, 246, 285, 397, 466). As an example, p. 200, in Bulgarian 'the future has no sign, but is made by combining the present with auxiliaries.' So throughout, either auxiliaries or pres. old Slavic, new Slavic, Bulgarian, Russian, Czechish, Polish. Leskien (loc. cit.) and Miklosich (iii. p. 89) of course assume that the ptc. *byše* implies indicative *byša*. The same assumption is very naturally made by others—Whitney, Gr. 1059 '*devaydti*'; Roots '*asiydyti* R. V.', '*dāsydti* A. V.'

<sup>2</sup>The indicative present may be used always to express what is more naturally rendered by the future. But it is not a future on that account. In *bhāvin* (used as a future) *elui*, or in English 'I go to-morrow,' 'we meet to-night,' the speaker simply widens his horizon till his present time includes the future. So 'to-morrow is Tuesday' is not future but absolute present. The auxiliaries referred to in Gothic are (anavairts visan) as in English, shall, have and begin (duginnan). Compare Streitberg, Perfective u. imp. actionsart, PB. 15, p. 132.

[*Keltic*: Subjunctive (*s*), *b*-future, etc.<sup>1</sup>]

Subjunctive *s*.

*Armenian*: "The future is a subjunctive of the aorist; its *ç* probably for *iç*" (Hübschmann, *Armenische Stud.* pp. 94-5).<sup>2</sup>

Subjunctive (*s*).

*Greek*: *s*-aorist (future), σῶσω, τενῶ (τενεσω), denom. vbs., πρᾶξω, πράξιω. Subjunctive without *s* (Homer), as in Latin, Sanskrit, Avestan (with *s*, as in Latin, Avestan, Vedic (?), Keltic, Armenian), used to express simple future.<sup>3</sup>

<sup>1</sup> The judgment of scholars differs regarding the problems in this branch. Brugmann says (M. U. iii. 57): "sjo-suffix does not exist in Irish. That the forms are, like Latin *faxo*, subjunctives is made probable by the subj. meaning," touching on other points only to be discussed by specialists. Windisch says (Irish Gr. §285) "the *s*-future often has subjunctive meaning." Zimmer (KZ. xxx. pp. 124, 125-8) claims the simple future of Windisch as aorist subj.; the reduplicated, as desid.; and denies (p. 115) that Irish phonetic laws make it possible to equate Keltic *s*-future and Sk. *sy*-future. So far as Irish goes, it seems to a layman that it is merely a question as to whether *s* can be the off-spring of *sy*, not whether *s* must be so. If *axo* is to be referred to *sy*, then the Keltic *s*-future must be, but this does not seem necessary. Accepting the mental equation 'Keltic ft.=Sk. future' (Windisch), so far as I can judge the phonetic equation *s*=*sy* is established in no Aryan language, except in isolated special forms of *si* (Lith.) resulting from secondary laws. For the purpose of this discussion, therefore, it should be stated that a Keltic sigmatic future parallel to *sy* has been upheld by prominent Keltic scholars, but is also stoutly opposed. Not pretending to an opinion in Keltic matters I leave this language bracketed out of deference to the great authority of the scholar whose opinion supports a theory (Keltic *s*=Sk. *sy*) which, if correct, overthrows my whole argument. Other Keltic futures do not concern the present argument, as a *t*-ft. if not subj. is not primitive.

<sup>2</sup> Brugmann, Grnd. i, §561: "Armenian *y* for *si*, *marđoy* (= *mṛtasya*, βροτοιο." Phonetic laws forbid this 'future' being derived from *sy*.

<sup>3</sup> It is phonetically possible to derive the Doric future from *sy* only when we ignore the fact that *ι* of the Dorian dialects, *θιός*, etc., represents *ε*. Osthoff, M. U. ii. 41; Brugmann, ib. iii. 59. Johansson rather daringly derives the same ft. from aorist *s* (see note above). In Greek, on a last analysis, we have three forms of the future (disregarding the subj.); two of them cannot be equated with *sy*, the third can with difficulty be set equal to it, but in a not unreasonable way can be explained as a resultant of contamination with the first two. It is then for him that insists on the identity of *s*=*sy* to prove that *πράξιω* cannot be explained in any other way than as coming from *sy*. Neither the close related Latin nor the other forms of Greek futures admit this hypothesis. *τενῶ* equates *\*tanisṛyāmi* as little as it does the real Sanskrit fut. *tanṣṛyē*; *δῶσω* (cf. *ἄκ-σω*=*ἄξω*) equates *dāsyāmi* only when *roio* equates no longer *tdsya*. "Von dem *ι* hinter *σ* ist im Griechischen bis jetzt noch keine spur nachgewiesen" (Brugmann, Gr. Gr. §140 anm.). Mahlow, KZ. 26. 586, also regards

So far as sigmatic form goes a *s* (not *sy*) is proved for Avestan, Armenian, Greek, Latin, Keltic; *sy* in Slavic-Indiranian is not proved for other languages (though suspected). But as for the means of expressing the future idea the subjunctive is used in Sanskrit, Avestan, Armenian, Greek, Latin, [Keltic], that is, both East and West, *sy* or *s*. One form alone of futures is the common property of the Aryans—a form in its earliest appearance often used as a simple future, whereas the sigmatic future in its earliest appearance is used to express will and becomes a time-form in proportion as the subjunctive gains the ability to express modality. Which first, then, represented to the Aryan the idea of simple future time? *δοῦν' αὐτὸν ἀνάγκη θάρερον*. He either used *s* for connoting will and the subjunctive for simple time, or the subjunctive for will and *s* for simple time; but the latter hypothesis appears to be untenable.

#### PART V.—THE PRIMITIVE FUTURE.

There can be little doubt that the sigmatic future originally denoted will. The fact has been stated independently of any speculation by the authors quoted above, Delbrück, S. F. 3. 8 ff.; 4. 98 ff., and was the first step in advance of that older theory which touching form and meaning claimed that the sigmatic future is from the nominal form plus the verb 'go,' or root plus 'be,' made by an auxiliary verb, and denoting 'am to' or 'am going to.'

That a tense has a force which is appreciable in older times but later is lost, shows it to have been in origin different to the tense it is in classic literature—not simple futurity was then the primitive function of the sigmatic future.

The subjunctive in classic Greek cannot be used as broadly as in Homer—where lies the difference? In Homer it may freely represent in independent clauses a simple future, in classic Greek it cannot. Is there then an antecedent probability that the subjunctive originally expressed not simple time, but will? The question is asked not concerning *s* (aorist) subjunctives, but con-

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the Doric fut. as a new form, though acquired by a different means. The same scholar's 'two futures' (one in *s*, one in *ēs*, ib. p. 597), are scarcely supported by sufficient evidence for granting to *ēs* a primitive character. The denominatives like *τιμήσομαι* were enough to explain *γενήσομαι*, as it seems to me.

<sup>1</sup> Sonne, KZ. xii. and Hirzel (Schleicher) KZ. xiii. respectively teach that *svāpisyāmi* is *svāpas* + *yāmi* (dormitum eo) and (or) *svāp* + "*āsyāmi*" (compare Schleicher on "*σiv* from *as*" future in Lith. Gr.).

cerning the subjunctive at large, did *ἔδομαι*, *ero*, mean I will or I shall eat, I will or shall be?

The field is limited almost to Homer and the Vedic literature, because in Latin the present subjunctive is formally entangled with indicative and optative forms, and because in other languages the desiderative *s* of the aorist subjunctive makes it impossible to subject the literature to syntactical analysis. This is also true to a certain extent in Greek and Sanskrit, but, on the other hand, pure present subjunctives are of literary frequency and can to a certain extent be kept apart from aorists.

That the subjunctive originally expressed the will of the speaker alone is a view at present generally accepted. The interpretation rests upon the results drawn from comparing Vedic and Homeric subjunctives. The invaluable labor of Delbrück which has produced these results is not lightly to be underestimated, nor is it in any way my intention to dispute the fact that the Vedic and Homeric subjunctive expresses will. Whether, however, sufficient weight has been laid upon the causes which united to produce the modal force found so conspicuous in these literatures must be considered in determining, not the Vedic, but the primitive value of the subjunctive. A great difficulty—that of prestige—lies in the way of any one who would dispute the force of many Vedic subjunctives given by Delbrück, for the meaning often rests on subjective impression and individual interpretation—where they that differ from the most pre-eminent scholar in Aryan syntax are necessarily at a disadvantage. Notwithstanding this difficulty the facts stated above seem to counterbalance the presumptive correctness of any theory that ignores the simple future idea of the subjunctive. The earliest independent subjunctive in Greek is capable of expressing simple futurity freely; the later, scarcely—the modal, hortatory, deliberative, prohibitive meaning cannot then, at least on *a priori* grounds, have been earlier than the subjunctive in *νῦν δ' ἂν πολλὰ πάθῃσι*='he will suffer'; *οὐδὲ ἔδομαι*='nor shall I see'; *ἔδομαι*='I shall eat.'

I purpose then briefly to consider the salient features of the modal subjunctive in the Rig-Veda with a view to seeing whether the idea of simple futurity has not been too much ignored in the examples especially quoted by Delbrück to prove that such an idea was not the primitive one. In many cases this will lead to the discovery that the learned leader of the investigation has not ignored the future idea at all, but frankly grants it and trans-

lates accordingly. How then do the two views stand related one to another? By insisting on will as the motive power of the subjunctive Delbrück interprets other passages as will that might as well be translated future, and thus unduly depreciates (as it seems to me) the antecedent probability of the future being, from a comparative point of view, the older content of the mood (tense). If, however, to express time and not will be regarded as the primitive function of the subjunctive, the doubtful cases must be left neutral or ranged on the side upheld by comparison with subjunctive use in Homer as against that in Attic Greek.

I agree, however, fully with Delbrück that a modal sense is, if not fully developed, conspicuous in the usage of the Rig-Veda. That modal sense is will. But its origin seems to me to have been fortuitous, not inherent. For a great mass of subjunctive forms are aoristic: of these by far the greater part aorists in *s*. We have then a desiderative element influencing the subjunctive from remote antiquity. Further, the injunctive, as I think, influenced form and function of the subjunctive. Hence it is antecedently possible that a will-sense may arise in the subjunctive as a whole from a will-sense originally peculiar to certain parts. That will-sense would, however, be an attribute of the agent.

Subjunctive phenomena in the Rig-Veda:

To express prohibition (with the injunctive) *mā* is used. With the subjunctive only *nā*, the same negation as that used with the indicative.<sup>1</sup>

Independent clauses: The first person of the subjunctive: It is clearly impossible to say with certainty whether *vīryā pi ā bravā* (10. 39. 5), means 'I shall,' 'I will,' or 'let me praise your deeds.'<sup>2</sup> The form is identical with the one used for the imperative. On the other hand the simple future is used in just such cases (cf. *vaksyāmah* above). In *δῶρ' ὀνομήνω* (Il. 9. 121) and in *σῆμά τε οἱ χεύω* (Od. 2. 222) the distinction between present and aorist, *δῶσω*, is well given by shall and will. In the dual and plural 'will' or 'let us' may be the result of the fact that the examples are chiefly preterital in ending (see note below on secondary endings), yet even here it will not do to pass over the fact that in, e. g. *dakṣiṇatō bhavā me 'dhā vṛtrāṇi jaṅghanāva* (10. 83. 7) the force of *adhā*

<sup>1</sup> Delbrück, *Syntax*, §§177, 203. In *Synt. Forsch.* I., p. 112, subjunctive and injunctive are not distinguished, and the examples must be carefully sifted.

<sup>2</sup> The citations are mostly taken from Delbrück's own collection in the *Forschungen und Syntax*, whose arrangement of examples I have also followed.



may be thus expressed: 'stand at my right, *then* we two shall slay the demons.'<sup>1</sup> Moreover, in the example *sām nū vocāvahai pūnar yāto me mādhu ābhṛtam* (1. 25. 17), which Delbrück translates 'let us talk after the drink is fetched,' the *nū* may be temporal rather than exhortative, and the meaning simple future. In the second class of 'hortatory' subjunctives *jēṣāma tvdyā yujā* (8. 63. 11), is it not quite arbitrary to translate 'we *will* conquer with you as friend' rather than 'with you as our friend we shall (are going to) conquer'? Although the modal sense must have been even more pronounced in prose as the indicative future superseded the future use of the subjunctive, yet even here in TS. 6. 2. 7. 4 *ihāivā vi jayāmahā ily* can scarcely mean 'will.' The demons are going to attack the gods; when they can they will conquer. Therefore the meaning must be, not 'here is the place where we will,' but 'here is the place where we shall conquer,' and consequently they there make the attack. Again, what force of will lies in Indra's remark to Prajāpati in AB. 3. 21. 1? Indra is here a smaller god than Prajāpati, but he has just done a great deed, and full of pride in it comes to Prajāpati and says, 'I am going to be the same as you, I shall be great'—Delbrück, 'I will be great,' a remark more fitting for the time before the great deed (*aham etad asāni yat tvam aham mahān asāni*, ego illud ero quod tu, ego magnus ero). It is, I admit, quite possible to read will in every first person future, such as 7. 86. 7: *āraṁ . . mīlhūṣe karāṇi*, but the same meaning with as much apparent right may be read in the present ind. used as a future, e. g. 10. 125. 4: *ṣrudhī ṣraddhivān te vadāmi*, 'listen, I am going to tell you something credible' (I will).<sup>2</sup> But in all these examples by the very nature of the person the province of the will-force, where it exists, is doubtful. Better opportunity for examining this is given by the second person.

The second person of the subjunctive: The first example of subjunctive of will (exhortative) quoted S. F. I. 111 is *ā vahāsi tām ihā devān* (1. 74. 6) wherewith is compared 6. 2. 11 *devān vōcaḥ*, 'bring the gods here, call the gods.' As for the second

<sup>1</sup> Compare *āv* in Greek, which even in stereotyped form may often with true effect be rendered 'then,' 'in that case,' as pronominal adverb. In 8. 100. 2: 'if you will be my friend, then we shall slay,' etc., just as above, preceded by *dsaq ca*, 'and you will be' (as in Old English) = *if*.

<sup>2</sup> For secondary endings see below. In 2. 11. 6; 21. 3, etc., either injunctive or future meaning is possible; *stavāma*, *prdvocam* like *vakṣyāmaḥ* or imperative, cf. 1. 41. 8, *voce*, inj.

case we do not know in what connection it originally stood, for it is out of touch with the metre of the verses immediately preceding; but in the first case the particle *ca* has been inadvertently omitted, which seems to change the sense to a *ca*-subj. This Delbrück himself renders as simple future in §186. Compare there *indraçca mṛdyāti no nā naḥ paścād aghām naçat*, two subjunctives rendered by Delbrück "if Indra is (will be) kind to us no harm will come to us," 2. 41. 11, Syntax, p. 330. So here the prior member is *havyā . . vītāye*, '(there are) oblations for their pleasure if you will bring them here.' Or, if this interpretation be objected to, since we have no correlation as in *ā ca huvé nī ca satsihā* (76. 4), the only meaning of *ca* must be in connection with the foregoing: 'happy is any one in whose house you are and here (to us also) you will bring the gods.' Another mistranslation (if I may use the word where so much is debatable) seems to me to be given by leaving out the environment of *ghāsaḥ, joṣāyāse* in 3. 52. 3; 4. 32. 16, which words Delbrück, Syntax, p. 309, gives in partial connection as 'eat (our cake and) take joyfully (our laud).' The passage (comparing the two references) obviously is original in the second, not in the first. In the second passage it reads thus: 'Let my song reach you (impv.), drive your steeds hither (impv.), you will eat a cake and rejoice in our song as a bridegroom (does) in a bride,' the result of the imperative is expressed by the (future) subjunctive. Again (1. 80. 3) Delbrück (Synt., p. 309) translates *hānaḥ jáyāḥ* as 'strike (Vritra) win (the water),' which obviously makes excellent sense and looks like an exhortative subjunctive until we read it in connection with the preceding imperatives *prēhy abhihi*, and consider that Delbrück himself translates an intervening subjunctive (*nī yāmsate*, Syntax, p. 316) as a simple future. The whole passage then seems rather to mean: 'Go on, attack him, be courageous, your bolt will not fail, for virile is your strength, you will slay Vritra, you will win the waters' (simple future). The poet is encouraging the god all along and tells him what will be the result of energy. The rendering of *mādayādhvāi* in 1. 37. 14 as 'wollet euch ergötzen,' I find, with all respect to Delbrück's interpretation, unsatisfactory on account of the omitted words *tātro ṣu* which precede, i. e. 'as soon as you come you will (are going to) be happy.'

Whatever modal force there is in the subjunctive shows itself best in circumstances where it is doubtful whether the modal force in the word resides in the form. Thus, in 4. 31. 3,

where Delbrück sees in *abhi bhavāsi* a 'komm herbei,' there is a concatenation of imperative and subjunctives, and to me the sense seems to be: 'How will he come, what will please him? (subjunctives as interrogatives Delbrück translates as futures); as helper indeed you will come (*abhi bhavāsi*); do come (impv.) to us.' So Ludwig, as far as the mood goes (du wirst siegen). With a participle also at times a conditional force is expressed, to which the subjunctive seems to be the apodosis. Thus 1. 139. 6-7: 'Come, O Indra, and you too, O Agni, listen to us; (when you are) worshipped you will speak' (and say what follows). The future indicative is found in this connection in prose, as in the examples cited by Delbrück from T. S. 1. 5. 9. 4: *mā stutāḥ suvargān lokān gamayisyati*, '(when he is) praised he will bear me to heaven.' Sometimes *utō* indicates the apodosis, as in 8. 26. 10-12: 'praise the Aṣvins; will they (subj.) hear the call and will they destroy the sinners? (O Aṣvins) hear, and you will understand (what I want to say); give me (wealth, etc.).' Here *gru-tān narotō . . vedathaḥ* can scarcely be rendered as if they were parallel commands or exhortations.

There are, of course, cases where exhortation or command may lie, not in the formal expression, but in the situation of a simple future. This use is parallel to English 'you will stop that noise at once,' the most emphatic of all commands. Again the future (subj.) expresses the result of an agreement, the only use the subj. has in prose in the second person (Syntax, p. 309). Thus in the great fish story, ÇB. 1. 8. 1. 1 ff., the deity says to the man 'you will do so and so' (subj.), and in other cases described by Delbrück, as where conditions are made: 'she said I will make a condition, you will get all your wishes, but the oblation shall (will) first come to me,' TS. 6. 2. 7. 1.

Subjunctives of the *ā tiṣṭhātaḥ* class (8. 9. 8) might in some cases be construed as an appeal, in others like those just mentioned, but even here in such an example as that cited for exhortative use from 8. 30. 2 *iti stutāso asatha*, we have rather a *sic laudabimini* than a *so lasst euch preisen*, for the verse explains the preceding. The only cases cited by Delbrück where a future meaning is irreconcilable with the text are, it seems to me, aorists with secondary endings parallel in thought to a preceding imperative: *trāsva . . rakṣisaḥ*, 8. 61. 17, 'save, protect' (on these forms see below), which differ radically from, e. g. 3. 29. 8: 'sit down here in your own place, establish the sacrifice . . being one that

rejoices the gods you will (thus) make sacrifice to the gods.' Generally the imperative differentiates the clauses, as in 8. 5. 27-30: 'in song we worship you; of golden seat . . the car you will forsooth ascend (subj.) . . with this car come to us' (impv.), where *hi* is less exhortative than affirmative. It is perhaps useless to add more examples. I think it must be admitted that in many of these cases the necessity of translating by a will-idea is not very clear. So evidently future are the two following cases that Delbrück himself regards them as about equivalent ('a sense nearly that of the future') and translates 8. 96. 7: 'Let there be friendship (impv.) then you shall (will) conquer'; and 1. 165. 12: 'you have pleased and will (shall) please now.'

The third person: The first example of this person which Delbrück (§175) regards as exhortative prayer to the gods is of the same class as some of those above: (the other gods drink) 'and so Indra will also drink,' 8. 94. 6 (so Ludwig), where *utó* (*matsati*) does not seem more than a connective. Again, in 8. 43. 24, *agnim île sâ u çravat*, 'I praise Agni and he will hear'; 8. 89. 3, 'being a Vṛtra-killer he will (is going to) kill Vṛtra,' *hanati*. Conditional again appears to be the participle in 5. 40. 4: *yuktva* . . *ûpa yâsat*, 'he will come when he has yoked,' though this passage appears to be late. Delbrück freely gives over to the future meaning more cases in this person than in the second, but it is difficult to see why *â ghâ tâ gachân úttarâ yugâni* (10. 10. 10) should be future, 'later ages will come,' and the other subjunctive four verses below, *pâri şvajâte*, should not be so ('another will embrace'). The adjective *úttarâ* (later) allows no escape from the future in one case: because nothing necessitates future in the other the subjunctive idea is preferred? Such plain futures as *uvâsa* . . *uchâc ca nú*, 'dawn has shone and will shine now,' 1. 48. 3, with 1. 124. 11: *vî nânâm uchâd âsati prâ ketûr grhâm grhâm úpa tişthâte agnis*, i. e. where an adverb shows that the sense must be future, should, I think, make us doubtful of accepting cases without such adverbs as exhortations (e. g. *tişthâti* in 4. 20. 2), especially as the Vedic prose can show no exhortative use, but employs the subjunctive only to indicate the content of conditions and promises. In most of these cases, moreover, the preterite ending is used, which seems rather to indicate command than will. It is, too, possible that the preterite subjunctive may have the force of a gnomic aorist when united with the present as in 10. 25. 11: 'He gives wealth (present) he helps the

blind and lame' (*tāriṣat*); cf. 1. 128. 5: *sá nas trāsate duritāt* (also after a present), 'he will (always) save us'; and so be distinguished from *rakṣiṣat*, 8. 61. 15, which like *rakṣiṣas*, ib. 17 (S. pp. 311, 309) when united with imperatives itself gives a command.<sup>1</sup>

When the cases that might be future are weighed with those which must be simple future in the list above, when it is remembered that Vedic prose gives no example of this form of subjunctive used in exhortative sense, and that the only Homeric instances of it are οὐδ' ἔσσεται οὐδὲ γένηται: καὶ ποτέ τις εἴησι, it will perhaps seem somewhat bold to claim that the subjunctive must be originally exhortative, representing the speaker's will.

The question where the will lies in a subjunctive utterance has thus far been veiled by the doubt in regard to the real meaning of the form. In the following examples that form is confessed to be equivalent to a future (I give Delbrück's translations), and it is important to note in each case whether the supposed volition lies with the speaker (as Delbrück claims for the subjunctive in general) or with the agent. In 4. 43. 1: *ká u ḡravat katamó juṣāte*, 'welcher wird hören, wird sich erfreuen?' 'who will hear' is evidently the meaning, and looking back to *ḡravat* above, it may well be asked why a simple interrogative turn to a verb should alter the modal force—the same question will arise with the negative. In 4. 31. 2: *kás . . matsat*, 'wird erfreuen.' In 1. 84. 18: *kó maṁsate*, 'wer wird gelten.' In 1. 40. 7: *kó aḡnavat*, 'wird (kann).' Other cases: *kó yāciṣat*, 'wer wird'; *kás srjāt*, 'wer wird'; *kadā nv āntār bhuvāni*, 'wann werde ich'; *gachātha*, '(wann) werdet ihr kommen'; *ḡḡrāvat*, '(wann) wird er hören'; *kuvāt ḡrāvatas*, 'ob sie hören' (dependent after *stuhī*). So *kim kṛṇavā*, 'what shall I do,' but here Delbrück yields to 'soll ich'; and puts potential force into *varāte* (1. 65. 6) and *pāri carāṇi* (5. 29. 13) 'kann ich (soll ich).' But compare *kim sá kṛṇavat*, 'what will he do,' 4. 18. 4; *ká imān ā dadharṣati*, 10. 155. 5. In most of these examples (all in Syntax, pp. 314–15) the present subjunctive is used; the will-element rests, if anywhere, with the agent, but is scarcely perceptible.

In final relative clauses Delbrück finds the same 'will of the subjunctive,' where it is surely questionable whether in, e. g. 'bring

<sup>1</sup> Of gnomic preterites I have noted: 1. 41. 5; 2. 23. 4–5; 2. 24. 5; 3. 56. 2; 7. 82. 6; 8. 5. 39; 8. 7. 1, and others. In 1. 84. 16, *yá eḡām bhṛtyām ṛṇādhat sá jīvāt, jīvāt* is certainly future or gnomic in sense, not volitive or jussive.



wealth through which we (subj. shall, may) conquer,' we have not, as often in Greek, a future rather than a potential sense. 'Give us a ship which will help our people' (Delbrück, 'welches befördere'); 'I bring a weapon by means of which you (shall) will be victorious' (mögest, D.), is not only a possible translation, but the other, in that it cannot be maintained in all cases, seems more smooth than tenable. In 1. 113. 11 Delbrück (p. 318) translates *yé páçyān* 'who will see' (simple future). Moreover, there is no change of form when we come to relative sentences which are not final, and here Delbrück resigns the subjunctive entirely to the future idea, so that the distinction between final clauses and prior clauses seems rather a legitimate mental abstraction of what ought to be in the sentence rather than what is. But ancient grammatical forms are to thoughts what ancient alphabets are to sounds, clumsy machines often failing to make fine distinctions. Every verbal expression embraces a number of possible nuances to the modern mind which may or may not have been in the mind of the ancient speaker, and where the latter makes no distinction the modern interpreter is not entitled to do so. Thus the subjunctive is used alike for what one may consider to-day to be potential expressions and for simple future. It is quite possible that simple future lies in both. For the former (Synt., p. 319): *yó nah pṛtanyāt*, 'wenn uns einer bekämpfen wird'; *yás túbhyam dāçān ná tám āñho açnavat*, 'wer dir dienen wird den wird keine noth erreichen'; *yád . . kariçyá indra nákiç tād āminat*, '(was) du thun wirst . . wird dir (soll dir),' etc.; *yásmai lokām kṛṇāvas*, 'dem du verschaffen wirst.' In Homer we have the same vague future: *ὅς κε φάγησιν*, and *(τιμή) ἥ τε καὶ ἐσσομένοισι μετ' ἀνθρώποισι πέληται* (S. F. I. 131). Delbrück calls one of this pair the 'subjunctive of expectation,' while in the other the 'will of the speaker' is prominent. It would be hard to say which were which. There is besides a certain genial broadness of expression in early language which is best left untouched, and best translated by a careful lack of particularizing. Delbrück himself, where now he translates as future, formerly (S. F.) translated the clause above 'es soll uns einer bekämpfen,' and where now he sees 'who will seek to injure,' saw before 'schmähen sollte.' The dependent subjunctives introduced by conjunctions offer the same problem as that above. Delbrück translates *ā ghā gamad yádi çrávat* in 1. 30. 8, 'let him come if he hear.' In connection with verse seven this clause means to me: 'we call the god, when (if) he hears (future) he will come,' as in *yadā*-clauses which answer to a

future perfect, *yadā* *εἰς τὸν χρόνον* *κρηάνας*, 'when you shall have cooked him.' *yādi*, in 1. 161. 2, in one of the rare cases of that form is construed with future indicative (*yādi kariṣyātha* . . . *bhaviṣyatha*). A pair of conjunctions is here important, *yād* and *yāthā*. According to Delbrück, *yād* is first temporal, then final, *when* and *that*; *yāthā*, *as* and *that*. With the first he regularly renders the subjunctive by the future; with the second he construes like a Greek *ὥς* with subjunctive: *yād pātāti*, when he will fly; *yād bhāvāti*, when it will be (§180. 2). Final clauses are, of course, more naturally given by *ὥς* + subj.; but it does not follow that they may not have been felt as futures. If *ὅπως* and *μή* still take the future (*ὅπως* regularly with the second person even in Attic) in Homer (*ὅπως ἐπιλήσεται*, *μή πως κεχολώσεται*) the same freedom is quite conceivable in the Rig-Veda, only one must remember how undeveloped were the forms of the future indicative. *yāthā* is correlative to *kathā* and *ātha*, and no objection is made to rendering the verb here by future. In 1. 120. 1 *kathā vidhātṛ āpracetāḥ* asks the poet 'how is an ignorant person going to (will) worship?' In 10. 52. 5 Delbrück translates *ātha jayāti* (after a clause involving a condition) 'denn soll er (wieder) siegen.' *kathā* means 'in what way'; *ātha*, 'in that way,' and *yāthā* 'in which way,' and this with the future rather than 'damit' with subjunctive meaning is, to my mind, the right interpretation of all these relative clauses. The negative is never prohibitive. Thus 10. 85. 26 (although this is a very late passage), *yāthāsaḥ* is 'in which way,' 'whereby you will be'; 7. 26. 1: '(I sing) so that he will hear' (lit. whereby he is going to hear); Delbrück: damit er höre. In like manner the *yād*-clauses. Like *yād bhāvāti*, 'when it will be' (Delbrück, as future), so the qualitative *yād*, 'this praise (shall) will be thine so that (how) you will show mercy,' 8. 45. 33. Meaning 'until' *yād* is equated with the future by Delbrück (1. 113. 10).

Finally, the use of the negative. When, as said above, the will of the speaker appears in the injunctive, *mā*, the prohibitive particle is used. The earliest subjunctive knows nothing of *mā*. It uses *nā*, the unprohibitive negative employed with the indicative. Nor does Delbrück construe negative clauses as other than thus indicated: *nā mṛlāt*, 'he will not be merciful' ('wird nicht'); *yād nā marā iti mānyase*, 'when you think I am not going to die' ('werde'). Delbrück finds only one case in which he thinks may lie a prohibitive sense, 8. 81. 4: 'come, we are going to praise Indra, he will not neglect us' (Delbrück, 'er vernachlässige uns

nicht'). What will there is lies here in the agent. It is difficult to see how a simple negative can change a modal notion of will into futurity.<sup>1</sup>

While I do not deny that the Vedic subjunctive seems at times to have a modal sense, I claim that many of the cases interpreted as modal may well be future besides the many more acknowledged to be so, and that the modal sense developed in proportion as the will of the *sy*-future yielded to simple futurity, thus taking the original function of the subjunctive.<sup>2</sup> When one considers in connection with this review of the subjunctive in the comparatively late age of the Rig-Veda the fact that the archetypical subjunctives *ero* and *ἔδομαι* are simple futures; that, as the subjunctive is used devoid of all modal sense to express the future in many cases of the Veda, so it is used regularly in Avestan, in Armenian, in (Greek and) Latin, and that, when earlier and later Greek usage is compared, the purely temporal use is seen to be gradually restricted in application, the later subjunctive being more exclusively modal than the Homeric, it must, I think, be admitted that it is impossible to postulate for the primitive subjunctive a purely modal (will) function, and that for the pre-Aryan period the future may well have been the original force of the mood (tense).<sup>3</sup>

The question then presents itself whether the Hindus also, like other Aryans, did not, before the full development of their future indicative in *sy*, employ particularly the *s*-aorist subjunctive to denote the future, and whether the real equation of the Greek future (subjunctive) is not with the corresponding Vedic *s*-aorist form, that is, whether instead of  $\delta\acute{\omega}\sigma\epsilon\tau\epsilon = d\acute{a}sy\acute{a}tha$ , we should not equate  $\delta\acute{\omega}\sigma\epsilon\tau\epsilon = d\acute{a}satha$ ,  $\theta\acute{\eta}\sigma\epsilon\tau\epsilon = dh\acute{a}satha$ . This old view (cf. M. U. iii. 33) has always lacked the support given it by an understanding of the state of the case, as regards the *sy*-future in literature. What was a mere phonetic equation becomes a syn-

<sup>1</sup> Compare Syntax, pp. 311, 316. *Ná + íd (néd)* may also introduce subjunctive. Delbrück as 'lest.' The use is spätvedisch, S. F. I. 122.

<sup>2</sup> It is not till the later prose period that the prohibitive *mā* is found with the subj. instead of *ná* (*uḥ* for *oi*). It is only with the first person that Delbrück deems the prose subj. the same with that of the Rig-Veda and here 'I will' or 'I shall' is exposed to the doubt already expressed. For the second person see above. For the third Delbrück says in general that it is not exhortative. The examples seem to me to indicate a slight modal increase. Compare Synt. p. 315, 316.

<sup>3</sup> I remind the classical reader again that the Latin subjunctive is phonetically united, and hence syntactically confused with the optative.

tactical probability when it becomes known that the Rig-Veda loses on analysis most of its *sy*-future verb-forms and employs the subjunctive as future.

There are so few roots in *siṣ*-, *sa*-aorists that their rare subjunctives are of no importance. But the *a*-aorist, *s*-aorist and *iṣ*-aorist embrace about one hundred roots apiece. Now for *a*- and *iṣ*-aorists there are scarcely any subjunctives with primary endings (the last has a number with secondary endings), but for the *s*-aorist there are more than thirty forms with primary endings alone (Grammar, 846, 849, 886, 893, 903, 906).

It was shown above that *sy*-futures in verbal form occur rarely in genuine parts of the older books, generally in late books and suspected passages. The *s*-future (i. e. subj. *s*-aor. with primary endings used as future), occurs, on the contrary, seldom in passages suspected of being late, for the most part in older books, and in large proportion in the eighth book which is (phonetically, treatment of vowels) reckoned the oldest. The accent of these forms is on the root-syllable.<sup>1</sup> I contend that they are futures.

*Trāsate* (cf. *trāsāthe*), 1. 128. 5, *nas duritāt*; 7, *dhūrtés*, 'his, are the offerings, he will save us.' (Accents as in text.)

*Darśasi*, 8. 32. 5 (I call you the god) 'you will burst asunder

<sup>1</sup> Grassmann's rejection of certain passages is seldom without reason (based on form, metre, etc.), of simple but convincing force. In discussing the *sy*-future, as each rejection favored my theory, I gave his reasons in detail. Here I simply mark as 'rejected' such passages as G. deems late, very few. In regard to the appellation *s*-future, used above with some freedom as an equivalent of subj. aor. in future sense, since almost all the forms have the same endings as those of the future indicative, it remains an open question whether the desiderative *s* was not furnished with indicative and subjunctive endings both, and all later put under the rubric of subjunctive, as the *s* which changed the simple future (of the subjunctive) imparted desideration to the form and made it similar to the indicative furnished with the same sibilant. In connection with this must be noted the two forms in the list below with weak roots on a par with *kṛṣṇé*, *stuṣṇé*, viz. *dṛkṣase* and *pṛkṣase*. For the others, with *trās-ate*, cf. *tār-ati*; with *ndānsante*, *ndānante*; with *né-ṣ-ati*, *nē(nay)ati*; with *mdd-s-ati*, *mddati*, etc. (denominative future, *trāsydte*, *naṁsydti*, *neṣydti*, etc.). The *iṣ*-aorist forms with primary endings bear the same relation to these as does *maṁsyé* to *maṁsyé*. There are only three, one with imper.-subjunctive ending, two with equivalents of the future (indicative) endings, *yāciṣāmahe*, 8. 67. 1: 'we are going to worship' (opening of hymn); and *saniṣāmahe*, 3. 11. 9 (end of hymn), as a result of hymn 'we shall get possession of all we want' (because we praise Agni, cf. 7-8: 'It is through worship a mortal acquires what he wants, since we are your praisers we shall (or let us) get all we want'). I interpret as *saniṣāmahe* = *saniṣyāmahe*, implying the forms *saniṣé*, *saniṣāmi*.

the stronghold; if it will be a pleasure to you (lit. if you will be pleased) to hear a song, come.'

Md. *darṣate*, 10. 120. 6 (see *sākṣate* below).

*Dāsathah*, 8. 40. 1: 'O Indra-Agni, ye twain most mighty ones will give us wealth whereby we shall (let us) conquer' (Ludwig, *ihr werdet geben*).

*dhāsathah*, 1. 160. 5: 'being lauded ye will bestow great glory and power upon us, whereby we shall (let us) extend ourselves on all sides.'

*dhāsatha* (*ā*, *bhōere*), 1. 111. 2: 'fashion us productive strength so that we shall live in a family of heroes—that (is) the manly power you will bestow upon our band.'

*Nāhsante*, 7. 58. 5 (compare 3. 33. 10: *nī te naḥsāi*): *vivāse*, *kuvin nāhsante* . . *pūnar naḥ*.; 'will they return?'

*Nēṣati*, 5. 46. 1: 'I yoke myself (to metre, i. e. I begin my song), . . . he (god) will lead me aright.'

*neṣathā*, 5. 54. 6: 'your glory has shone forth, when you will have stolen (*mōṣatha*) the flood then you will lead us well (in song).' The storm gathers.

— 8. 47. 11: 'like steeds to a good watering-place you will lead us well.'

*Pārṣati*, 5. 25. 1: 'I extol Agni, he will give . . . he will save from enmity, for he is trusty.'

(*ati*) *pārṣathah*, 8. 26. 5: 'for you will save from enmity.'

— 5. 73. 8: 'when you (will have) come over' (i. e. future, *yāt samudrā 'ti pārṣathas*; Ludwig, wenn ihr durchschritten habt).

— 10. 143. 4: *cilē tād vām surādhasā rātiḥ sumatiḥ* . . *ā yān naḥ sādane pṛthau sāmāne pārṣatho narā*, 'when you will save us.'

*pārṣatha*, 1. 86. 7: *subhāgaḥ sāḥ* . . *astu yāsya prāyāṁsi pārṣatha*, 'happy shall he be whose food ye will take (accept).'

— 8. 83. 3: *āti no viṣpitā puri* . . *parṣatha* ('will save').

*pāri-Pāsati*, 10. 17. 4 (1-2 Grassmann rejects, 3 impv. and *pāri dadat*, 4, *pāsati*, *pātu*).

*pāri-pāsataḥ*, 7. 34. 23 (*ubhé rōdasī* . . *naḥ*; Gr. rejects because of metre; 22 impv.).

*Matsati*, 8. 94. 6: 'The maruts drink and Indra will also drink' (*utó*, so Ludwig).

*mātsatha* (*ā*), 1. 186. 1: *devā etu, āpi yāthā mātsathā no viṣvaṁ jāgat* ('so that you also will').



*Mañsase*, 10. 27. 10: *átré 'd u me mañsase satyám uktám divi-pācca yāc ca cātuspāt saṁsṛjāni, sribhīr yó átra vṛṣaṇaṁ pṛtan-yād áyuddho asya vibhajāni vedaḥ*. I will let Ludwig's translation show the future of the first; the following are imperatives: *da wirst du für wahrhaft meine rede halten*.

*mañsate*, 1. 84. 17-18: *kó mañsate sántam índram* (after *ká iṣate tujyáte kó bibhāya*); *kó mañsate vīlīhotraḥ sudevāḥ* (after *kásmai devā ā vahān ācū hōma*).

*anu* — 8. 62. 11: 'Let us (or, we will) join hands for victory; then every one will approve'—*arātivā cit . . ānu nau mañsate*.

— 5. 46. 4: *rayé no vibhṛvā ānumañsate*, 'will be favorable' (cf. *neṣati* above).

*pari* — 7. 59. 3 (2, *prá sá kṣāyaṁ tirate . . yó vo dāṣati*): *nahí vaç caramāñcanā vásisṭhaḥ parimañsate . . pibata*. '(He who gives to you increases his wealth); for that reason V. will not neglect the least of you; drink ye.'

*māñsante*, 7. 34. 3 (cf. *pāsataḥ* above, in 23): *vṛtréṣu ṣūrā māñsanta ugrāḥ*. In this example it is impossible to find an expression of the speaker's will, 'they will be reckoned heroes among the Vritras' (compare *māñsāi*, 10. 113. 10: *ābhara . . yēbhir māñsāi nivācanāni ṣāñsan*).

*Yakṣataḥ*, 2. 3. 7: *daivya hótārā . . ṛjū yakṣataḥ sám ṛcā* (with impv.). (Then) 'you will sacrifice,' compare 5, impv. 'let the doors open.'

*āyakṣate*, 8. 19. 4 (we choose thee): *só apām ā sumnām yakṣate divi*, 'will sacrifice.'

*Yamṣataḥ*, 7. 74. 5: 'they will confer glory' (Grassmann rejects without giving any reason; the metre is right).

*vī* — 10. 66. 7: *yāv ijiré . . tā naḥ ṣārma viyamṣataḥ*, 'I call them . . they will confer protection.'

*ūd-yamṣate*, 1. 143. 7: *ṛñjate . . indhāno ūd u no yamṣate dhīyam*, 'and he will bear up.'

*nī* — 1. 80. 3: *prēhy abhīhi dhrṣṇuhi ná te vājro nīyamṣate, índra, nṛmṇām hi te śavo hāno vṛtrām jáyā apāḥ* (see above). Delbrück, Syntax, p. 316, 'wird nicht versagen.'

*Yoṣati*, 8. 31. 17: *ná prá yoṣan ná yoṣati*, 'nor held him off nor will' (compare ib. 15, *abhī bhuvat*, 'will overcome,' and 3, *dyumān asad ráthaḥ*, 'will be').

8. 33. 9: *yádi maghāvā ṣṛṇāvat . . ná indro yoṣaty ā gamat*, 'he will not linger afar off' (hören wird, Ldw.).

*ā-Vaṁsate*, 8. 103. 9: *ā vaṁsate maghāvā virāvad yāçāḥ sámīd-dhaḥ*, 'will acquire.'

*āpa-Varṣathaḥ*, 8. 5. 21 (19, *pibatam*, 20, *tēna çām váhatam*) *utā no divyā iṣa utā sindhūn . . āpa dvāreva varṣathaḥ* (24, *āyātām yād huvé*), 'you will open like doors the streams.'

*Vakṣati*, 1. 1. 2: *sá devāñ éhá vakṣati* (1, *agnim ile*).

1. 14. 9: id. of priest (8, let gods drink, 9, the priests will bring them).

1. 129. 8 (variant metre, but not rejected by Grassmann): *ná vakṣati, ná vakṣati*, 'the weapon will not carry (to us).'

*Vakṣataḥ*, 8. 6. 45: *tvā hārī vakṣataḥ* (from 34 to 48 Grassmann considers late), 'will bring,' here and below.

8. 32. 30: id. vs. with 6. 45 (but not rejected).

8. 14. 12: *hārī somapēyāya*.

8. 34. 9: id. (8, *vakṣat*, 10, *āyāhi*).

8. 2. 27: id. (*gamat . . āyāhi*).

*ūpa* — 8. 4. 14: (*ūpa hārī, sāptayo váhantu*).

1. 16. 2: (1, *vahantu*): *hārī ihōpa vakṣataḥ* (4, *ūpa ā gahi*).

*Rāsate*, 1. 96. 8: *draviṇodāḥ prāyaṁsat . . rāsate* (*dirghām āyuh*), 'will give,' here and below.

7. 45. 3: *martabhójanam ádha rāsate nas* (preceded by *sāviṣat*).

8. 1. 22: *dádāti . . sá sunvaté ca stuvalé ca rāsate*.

4. 55. 8: *tāny asmábhyaṁ rāsate* (*agníḥ*). Grassmann rejects.

10. 122. 1: *vásuṁ ná ciirámahasam grñīse . . átithim . . sá rāsate*.

*Sākṣate* (*darṣate*), 10. 120. 6: *stuṣéyyam . . ádarṣate dānūn . . prá sākṣate pratimānāni* (5, *çāçadmahe codáyāmi çīçāmi*), 'will overcome.'

*Hāsate*, 9. 27. 5: *eṣá śūryeṇa hāsate pávamāno ádhi dyávi*.

With weak root: *sám-dīkṣase*, 1. 6. 7, 'you will appear, going with Indra,' and *prkṣase*, 10. 22. 7: (*ā na indra prkṣase 'smākaṁ bráhma*).

I have incorporated into this list only forms with primary endings. Those with secondary endings (some are really indicative) appear more like the injunctive, perhaps by analogy with it obtaining their imperative character; yet this is rather more marked in the later books, and perhaps it is on this account that they seem to be used with predilection by the subsequent writers (of books one and ten) and are apt to appear in later and sus-

pected passages. This general observation will be fully corroborated by a comparison of the forms in the list above (in respect of place) with the preterital forms. For it will be noticed that the primary endings show chiefly in early and unsuspected passages, while (to cite a few instances from a list too long to discuss in detail) on examining the position of secondary endings we find: *chantsat*, twice, 1. 132. 6 rejected, 10. 32. 3 rejected; *darṣat*, twice, 9. 74. 7; 10. 27. 7 rejected; *āti dāsat*, 8. 1. 33 rejected (evidently here aorist indicative; this same hymn has also *yāsat*, 8, *yoṣat*, 27); *yāsat* again in 5. 40. 4 rejected where also *matsat*; *rāsan*, 7. 34. 22 rejected, etc. Or, to make direct comparison between the same verb with primary and secondary endings, compare *vakṣati*, *vakṣataḥ*, occurring 1. 1. 2, 1. 14. 9, 1. 16. 2, 1. 129. 8, 8. 2. 27, 8. 4. 14, 8. 6. 45, 8. 14. 12, 8. 32. 30, 8. 34. 9 (only 8. 6. 45 rejected) with *vakṣas*, *vakṣat*, *vakṣan*, 1. 104. 2, 1. 135. 4, 1. 157. 3, 3. 5. 9, 5. 33. 2, 6. 22. 7, 8. 34. 8, 8. 74. 14 rejected, 10. 20. 10 rejected, 10. 61. 23 rejected, 10. 176. 2.<sup>1</sup>

<sup>1</sup> The preterital subj. is old and loses the future sense first with its changed form. The endings are regarded as due to the abrasion of the primary, and Delbrück warns against drawing other conclusion from this fact (*Verbum*, p. 192) than that abrasion of endings is more rapid in forms increased by the additional element (*s* of the aorist, *Verbum*, p. 192). The abrasion seems to me to have been at first mechanical, and then aided by analogy with injunctives. In proportion as the subjunctive gained in modal power, expressing a likeness to imperative, its forms were more often assimilated to those of the indicative, which as unaugmented preterite was used as an imperative from the earliest times (*ḍōc*, *dās*), so that the modal effect of the subjunctive was by reflex action still further imperativized. This undoubted function of preterite indicatives has an important bearing on some subjunctive forms not touched upon above. I refer to *jeṣam*, *stoṣam* alongside of *stoṣāni* and the like. If the subjunctive had originally future sense and primary endings the first persons would often be like the indicative (*vadāmi* in 10. 125. 4 has future sense, see above), while mechanical abrasion, by analogy with preterite *jaiṣam*, would give *jeṣam*, etc.; they must then be, when not indicative (*dāsat*), the result of contamination with preterite indicatives used as imperatives (injunctives) in ending like *regam*, etc. This function leads to the inquiry whether the *ā*-root examples 'of problematic character' with optative value (*Grammar*, 894c) *yeṣam*, *geṣam*, etc., do not give a key to the original force of that mood. The optative is a grammatical organ which was primarily preterital in form and future in meaning (whether optative or potential). A grammatical entity past in form and future in sense must be a sort of future perfect. Such a future perfect can easily develop into a potential ('will have been' = 'would be, might be'), but I have always been puzzled to account for the optative derivation (Delbrück now admits that the potential idea may be as old as the optative, *Syntax*, p. 302). By granting that the preterital form enabled the optative to be used in

On comparing the use of present subjunctive (without *s*) I find that of the 47 cases of *asas*, *asat* 28 are in books 1 and 10 alone. The only forms of *s*-aorist subjunctive with primary endings not coincident with indicative are in the Rig-Veda (recorded) *nañsāi*, *mañsāi*, *trāsāthe*, and 10. 88. 3 *stoṣāñi*. In most of the forms of the list above I can find no more exhortation or 'speaker's will' than in a *sy*-future, only an actor's will, or, with the future's weakening of sense, futurity.

To summarize what seem to me to be reasonable deductions from the facts given above :

The present indicative modified by alteration of stem ('subjunctive') was used to connote the idea of futurity. From prehistoric times a desiderative *s*, when united with the present stem, the function of which had been to express time, imparted to that stem as it did to simple roots the force of volition, a force that soon affected unsigmatic forms as well, so that the whole tense or mood varied between *will* and *shall*, and thus produced the fluctuation of meaning seen in the subjunctive. The most primitive (non-sigmatic) futures of this sort (present subjunctive) have, therefore, no sense of will, *ero*, *ἔδομαι*.

The lengthened *ā* and the strengthened middle-endings are indeed pre-Aryan, but non-archetypical. The former arose from confusing thematic and athematic stems. The forms *hānati* and *ἀλεται* are the prototypes of the subjunctive (future). Whether, therefore, we call the *s*-aorist subjunctive a subjunctive or a future is a question of nomenclature alone.<sup>1</sup>

As *s* had intruded on the future (subjunctive), so before or in the period of Slavic-Indiranian unity (which is no figment; compare the gutturals) this *s* began to be used with the indicative

an imperative sense, solely through the accident of form, one gets a legitimate optative development through the preterite form which in turn must have been potential by virtue of its tense-value. Since the imperative itself appears to have been originally a preterite with modified endings in part, and in part endings made from stereotyped adverbs (*dhi*, *hi*, *ni*, *tāt* adv., *tana* as in *nūtana*) the question arises whether the Aryans did not at first make these later modal expressions out of indicative tense-values, somewhat like Hebrew, where imperative, jussive and intentional (voluntative) moods are derived from the imperfect. The imperative and optative are, however, firmly established as such at the time of unity; only the subjunctive seems not yet to have been fully given over to modality, but was already inclining in that direction.

<sup>1</sup> Unmodified presents, *εἶμι*, etc., are formally normal when used as futures. Their futurity lies in the mental attitude of the speaker.

present, parallel to its long established use in the indicative preterite. Prior to the expansion of the *sy*-future less durative forms had been attempted by attaching *s* directly to root or stem and fitting it out with present endings. The same reason as that which caused the creation of the Latin auxiliary future produced the Sanskrit (indicative) future in *sy*, the gradual acquisition of modal force and generalizing of future sense in the inherited future (subjunctive). Vestiges of the first formation may be seen perhaps in R. V. *stuṣé* and other antique formulae of religious service, and in A. V. *sākṣé*, *mekṣāmi*; of the root, in *hā-s-anti*; of the 'subj.' in *dāsati*; *δῶσεται* = \**dāsate*.

This future yielded to one which began as a denominative participial adjective,<sup>1</sup> was established as a verb when Eastern unity ceased, but still used sparingly as compared with 'participles' or with the subjunctive future in the earlier period of the Rig-Veda. It denoted will. This force gradually gave way as the subjunctive future and injunctive superseded it in this function (become modal to give will and command, and then united in this sense), and the *sy*-future became a simple tense of future time, which sense, conversely, for the most part passed from the subjunctive.

As an intermediate step between the *sy*-future of the later Rig-Vedic period and the general subjunctive future of the earliest time appears the special development of the subjunctive with primary endings (future) modified by *s*, which in most cases (even after the establishment of special subjunctive types) is still the formal equivalent of an indicative thematic stem,<sup>2</sup> and corresponds to the *sy*-future form. Since this is the form of (subjunctive) future employed by most Aryans it is probable that it is an inherited strong future of the Hindus, and may be equated directly with its Greek and Latin equivalent. The diminution of such *s*-future forms is in proportion to the increase of the *sy*-

<sup>1</sup> Wackernagel gives a curious parallel to this in K. Z. 28. 141. The Greek sigmatic desideratives, *ὀψελοντες*, *πολεμησέλοντες*, etc., are all used as participles for some time before they assume verbal functions. In Hesiod *δρασελοντες*, in Soph. *δρασειε*, etc. (no verbs in older poets and prose)—an interesting analogue, if nothing more, to R. V. *sariṣydn*, *haniṣydn*, A. V. *sariṣyḍtha*, *haniṣyḍsi*. The ending *ni* (the only ending of the subjunctive which is not primitive) comes from the adverb (as in the case of other imperative endings) and is neither primitive nor even in the Rig-Veda a necessary addition. It was probably the result of injunctive, imperative, influence.

<sup>2</sup> Compare *√hā-s-ante* and *hāsati* in list above, *bhū*, *bhūṣati*, etc.



forms. An auxiliary future may possibly be assumed for the primitive period.<sup>1</sup>

EDWARD WASHBURN HOPKINS.

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<sup>1</sup> I add this sentence with hesitation. The statement is, of course, based upon the fact that Latin and Keltic have a future in *b* which is supposed to be derived from *bhū* added to an original dative infinitive in *e*, *sadē-bhuo*. If the ending is really *bhū* the form cannot be reckoned as primitive, for such a formation is only paralleled by an *ām*-inf. with the (periphrastic perfect) form *babhūva* (also used with ptc.) which is later than *kr*, while the later periphrastic future (unknown to the Rig-Veda) takes *as*, and not *bhū*. There are, moreover, phonetic difficulties in the way of the equation, and so many theories affecting the preceding vowel that I scarcely venture to compare the following Vedic form (based also on a dative infinitive preceding the verb) except as an interesting parallel to the Latin form by a suggested equation *b=dh*. The form *bam*, like *eram*, must be a later growth, so that its vowel does not come in play (no such form exists in Keltic). The form *bo*, always after vowels, may represent *dh*, as in *uber*, *obāp*, *ūdhar* (Umbrian *telust*, *l-future=d*?). Analogous to *gāni* may be assumed *dhā-ni* (the first person is not extant). *Dhāh* may be subjunctive (*dhāti*, indic.) or injunctive. Now this form is used in the sense of future (subjunctive as above) with the meaning of put to, i. e. make, with dative infinitive (or of noun, it amounts to the same thing) in *e* which regularly stands just before it. Compare 1. 54. 11: *naḥ . . iṣē dhāh*; 7. 20. 10: *naḥ . . iṣē dhāh*; 3. 36. 10: *asmē cātām qarddo jīvde dhāh*. In 5. 36. 5, *no bhāre dhās* (in spite of the accent) seems also to be used like the other infinitives in this formula. A corresponding infinitive to *av* would give *\*avē-dhā=avebo*. *Dhā* is used, like *kr*, in the sense of put, make. The identical position is kept when *dhāh* is injunctive: *mā naḥ . . riṣē dhāt*, 5. 41. 16; 7. 34. 17; 'he shall not make us to suffer.' In most cases the *make*-, *do*-idea is appended in the same place (compare for *dhā* as pendant *graddhā*, *credo*, and old English *derringdo*), so that the formula seems periphrastic. Compare *jīvde dhāh* 1. 72. 7, with *dadhāsi jīvde* 1. 91. 7 (the pf. in 2. 23. 14, *yē tvā nidē dadhiré*). There are doubtless a good many more cases. The Greek equivalent of *dhā*, *bo* would be *-θō* (and here *-θην=dhām*). Independently with preceding inf. and with somewhat of this sense in *τίς ἐμαυτὸν εἰναι θō*; 'whom shall I make myself for to be?' De Cor. 180. If Vedic *tha* represents an earlier *dha* (compare *adha*, *atha*, *grudhīy*, *grath*, *gūr-dhay*, *dh* and *th* sec. roots (cf. *ἐργασθῆν*), *nādhāmāna* Veda, *nāthate* Brāhmaṇa) one might even hazard the query whether this form was not employed to make verbal endings in Sanskrit, of which *tha* (*θa*), *thas* survived in stereotyped form. This would bring one round about to Wackernagel, K. Z. 30. 302. But the preceding *e* in Latin is very likely not a dative at all. The most important point in regard to *bo*, however, is that, whether from *bhū* or *dhā*, if from either, it is a subjunctive used to designate simple future.

## II.—PROMETHEUS AND THE CAUCASUS.

It is a wide-spread belief among scholars that the scenes of the two plays 'Prometheus Bound' and 'Prometheus Loosed' were different, and that Aeschylus represented his hero as performing an underground journey of a thousand or two of miles between these two plays. It is supposed on the one hand, from testimony of Cicero and others (to be considered hereafter), that the scene of the Prometheus Loosed was certainly the Caucasus mountain range. And on the other hand it is thought to be equally clear, from internal evidence of the tragedy itself, that the scene of the Prometheus Bound is not the Caucasus, but the northern edge of Scythia near the ocean. Now Prometheus is swallowed up by the ground at the end of the first piece, and reappears, still bound to his rock, at the beginning of the second, and it certainly follows, granted the above premisses, that the poet intended the subterranean transit in question.

C. G. Schütz, the well-known editor of Aeschylus, was the first to assert distinctly that the two tragedies had different scenes.<sup>1</sup> This was in 1782. Bothe, Porson, Heyne, Hermann and others presently gave in their assent.<sup>2</sup> It must be observed that these earlier scholars did not conceive of the two plays as connected in a trilogy. When Welcker, in 1824, maintained the existence of a Prometheus-trilogy, he rejected the notion of a change of scene as incompatible with that theory. On the other hand, Hermann, holding to the difference in scene, made it a prime argument against Welcker's theory of a trilogy Prometheus. It was reserved for a later generation to believe at once in the trilogy and in the change of scene, and so to hold that Prometheus is somehow transferred from one place of punishment to the other. This has become, I may say, the received doctrine, set forth in most editions of the Prometheus.<sup>3</sup> And it has met with surpris-

<sup>1</sup>Although Stanley, a century earlier, had maintained that the Caucasus was not the scene of the Prometheus Bound.

<sup>2</sup>See citations Welcker, Aeschyl. Trilogie, p. 33.

<sup>3</sup>First, perhaps, G. C. W. Schneider in his edition (1834). Then Schömann, Woolsey, Paley, Weil, L. Schmidt and Wecklein. Also Bergk (Griech. Litera-

ingly little dissent, considering the difficulties with which it is beset.

For that it is a hard doctrine, few, I think, will deny. The trilogy theory will doubtless stand. No one—now that Wilhelm Dindorf has passed away—doubts that the Prometheus Bound and the Prometheus Unbound were acted together, and it is probably needless for me to rehearse the evidence for it. But how can the scene of these two plays have been different? The case is not that of a simple shifting of scene, as between the Choephoroi and the Eumenides. Prometheus cannot be understood to transfer himself by ordinary locomotion. He remains fixed to his cliff in the convulsion which ends the first play, and he is still fixed there at the opening of the other. That he has meanwhile passed, cliff and all, to another part of the world seems a singularly irrelevant and unnecessary conception. There is no indication of such a transfer in the text of the preserved play. Hermes foretells what is to happen, with considerable detail. The craggy gorge will be shattered by a bolt of lightning; Prometheus will be hidden from sight; he will lie in a *πετραία ἀγκάλη*, 'a crevice of rock'; after lapse of long time he will come to the light again (*ἄψορρον ἦξει εἰς φάος*); then the eagle will come to devour his vitals.<sup>1</sup> There is nothing of a subterranean journey, nothing of a transfer to the summit of Caucasus. We cannot, of course, assert positively that this was not mentioned in the Prometheus Unbound. And yet it seems hardly possible that it was. The Prometheus *λυόμενος* began directly with the parodos of the chorus of Titans.<sup>2</sup> After this came a speech of Prometheus to the Titans. Here, if anywhere, was the natural place for this change of the place of punishment to be mentioned. Now we have from Cicero's hand a loose translation of the whole of this speech, but

turgeschichte) and (in substance) Bernhardt. The same conclusion is reached in the dissertation of Bernhard Foss *de loco in quo Prometheus apud Aeschylum vinctus sit*, Bonn, 1862. Schömann, if I understand him, fancies that Prometheus, after his underground confinement, was shot up like a rocket and fell on the top of Caucasus. Schneider supposes that the hero was understood, in the interval between the plays, to be dragged to the Caucasus and rebound there by Hephaestus. But the favorite view is that of an underground passage.

<sup>1</sup> Verses 1016-1025.

<sup>2</sup> "εἰθὺς ἀρχόμενος τῆς τραγωδίας" in Procopius Hist. Goth. 4, 6. See the fragment-collections. Notwithstanding this, Schömann makes his "Gelöster Prometheus" begin with a soliloquy of the hero.

there is no allusion to any change of place, though the hero describes his past binding by the hand of Hephaestus and his present punishment through the eagle.

Finally, no adequate motive for the supposed change of locality can be assigned. Wecklein ascribes it to the desire for variety. But the variety could have consisted in nothing but the substitution of one painted scene for another very similar one. And since the publication of Wilamowitz's recent article in *Hermes* on the 'Bühne des Aischylos,' it will be doubted by many whether scenes or scenery were known to the Attic theatre at the time of the composition of this trilogy. Variety would be dearly bought at the price of so clumsy a device. And Aeschylus did not hesitate in the *Oresteia* to keep the same scene during two successive plays—*Agamemnon* and *Choephoroi*.<sup>1</sup>

It might occur to some one to suppose a change of place to be somehow bound up with the engulfment and the reappearance of Prometheus. This engulfment is, of course, a feature added by Aeschylus; it was no part of the former story. I dare say that some have thought that the swallowing-up was a device for bringing about a change of scene—that Prometheus is made to disappear in the bowels of the earth in order that he may reappear in a different place. A little consideration will show that this is not so. The upturning at the end of the *Προμηθεὺς δεσμώτης* is a device—and the only possible device—for getting Prometheus off the scene. The poet wished to exhibit the bound Prometheus in two successive plays, separated by a 'wait.' In the modern theatre this would be managed very simply. The curtain would descend on Prometheus at the end of one piece, and rise on him at the beginning of the other. But what was the primitive playwright to do? Prometheus could not be left hanging during the interval between the two plays.<sup>2</sup> He must absolutely be got off at the end of the *δεσμώτης*, and got on at the beginning of the *λύόμενος*—and got on in a bound condition, for the binding scene cannot be repeated. We see what an embarrassment the poet was in, and how ingeniously he met the difficulty; and we see that all this points to no change of locality whatsoever.

<sup>1</sup> Schneider assigns other and incredibly trivial reasons for the supposed transfer. As, for instance, that Zeus desired to remove Prometheus from the sympathetic companionship of Oceanus and his daughters!

<sup>2</sup> I do not urge the consideration that Prometheus was represented by a dummy in the first play and by a live man in the second, because there are still some who doubt the use of a lay-figure in the Prometheus Bound.

The makeshift is indeed more successful in the termination of the first piece than in the opening of the second. The catastrophe of the *δεσμώτης* is extremely effective, and no one suspects a device. Not so the commencement of the *λυόμενος*. This play must have been rather abruptly and awkwardly ushered in by the rising of the silent and still fettered figure of Prometheus from the hollow underneath the orchestra. Nothing else is possible. But this rising, observe, cannot be understood as his first emergence from underground imprisonment—the 'coming to light' promised in verse 1021 of the preceding play. For if so, where does the punishment by the eagle come in? This punishment had gone on for ages at the time when the action of the drama begins.<sup>1</sup> Clearly the emergence of Prometheus is no part of the play, but only, so to speak, a signal that the play is to begin. As soon as he is there, he is immediately supposed to have been hanging there for an immense period. And this explains why Prometheus says nothing at the outset of the piece, but waits to be addressed by the leader of the chorus. Were he supposed to be emerging for the first time after countless years spent in solitary darkness, this would be highly unnatural.

We see, then, that the swallowing-up of Prometheus and his reappearance are without significance for the question of locality, and are primarily a means of effecting an exit and a re-entrance of the hero.

Shall we then adopt Welcker's view, and say that Caucasus is the scene of *both* plays? The difficulties in the way of this are familiar. First, the opening lines of the Prometheus Bound say nothing about the Caucasus, but speak of a remote region of Scythia. It further appears that this is near the Ocean, for the Oceanids hear the blows of Hephaestus's hammer. Secondly, the directions given to Io show that the speakers are not stationed on the Caucasus. After leaving Prometheus, Io is to come to the Nomad Scythians, skirt the country of the Chalybes, reach and ascend the valley of a river Hybristes, and then she is to arrive *πρὸς αὐτὸν Καύκασον, ὁρῶν ὑψιστον* (verse 719) and cross its lofty summits. Obviously a long journey is here described, and the starting-point cannot be the Caucasus itself. Thirdly, the Caucasus is spoken of as peopled, or as having peoples living near it (422), while the scene of the play is an *ἄβυρος ἐρημία* (2), an *ἀνάνθρωπος*

<sup>1</sup> *Vetusta saeculis glomerata horridis luctifica clades*, Frag. III, verse 25.



πάγος (20). These arguments are cogent, and show that the Prometheus Bound is not enacted in the Caucasus. Welcker's attempts to weaken their force partake of the nature of quibbles. Caucasus, he said, was looked on as a Scythian mountain, and it might be that the poet meant that mountain to be understood, without naming it. He laid stress on the word αὐτόν in 719. It meant, he argued, the *summit* of Caucasus, in distinction from its lower regions.<sup>1</sup> This, even if true, does not fully meet the difficulty. But surely αὐτός is here simply the αὐτός of celebrity. Caucasus was to Aeschylus the type of a lofty and impassable mountain. 'Ascend the Arve,' we might say, 'and you will see Mont Blanc himself before you.'

Welcker's view has won but few adherents. One of these is P. J. Meyer, author of a dissertation published at Bonn in 1861.<sup>2</sup> Meyer endeavors to get relief by an extension of the term Caucasus. The scene of the play is in northern Scythia, but it is also in Caucasus. 'Caucasus' (he thinks) comprehends all the mountains of the northern world. The crucial verse 719 he understands as Welcker does, but he is better able to explain how Io makes so long a journey and yet is still in the Caucasus. But after all, this is only an alleviation of the difficulty. Granted that Aeschylus may have meant more by 'Caucasus' than we do, that he may have supposed it to extend to the Ocean and to be in Scythia.<sup>3</sup> The stubborn fact remains that he has *not* named Caucasus in defining the scene at the outset, and that in two places later on he *does* speak of Caucasus in terms which he could not have used if that were the scene of the play. In short, this whole theory runs counter to the natural interpretation of the text of the Prometheus Bound. 'Persuasum habeo,' says Meyer, 'spectatores primis sex versibus fabulae recitatis statim de Caucaso cogitasse.' We venture to affirm on the contrary that no spectator or reader,

<sup>1</sup> So before him a scholiast: ἦτοι πρὸς τὸ ἕτερον μέρος τοῦ Καυκάσου· ὁ γὰρ Προμηθεὺς ἐν τινὶ μέρει καὶ ἀκρωρείαι τοῦ Καυκάσου ἐστανώθη. ὁ δὲ Καύκασος ὄρος ἐπὶ πολλὸν οἰήκων. Hermann declared this view unworthy of a sane man.

<sup>2</sup> *Aeschyli Prometheus vincetus quo in loco agi videatur.*

<sup>3</sup> The ancients often speak of the Caucasus as Scythian. There is some authority for extending the name to the Rhipaeian mountains (Dionys. Periegetes 663 and Eustathius *ad locum*). Probably Foss is right in the conclusion that Aeschylus's geography placed Caucasus and the Phasis to the north of the Maeotis instead of the east of the Euxine, and represented the Phasis as flowing into the Maeotis. Only in this way does Io's route become fully intelligible.

ancient or modern, unless his mind was prepossessed, ever gathered from the play itself that its action lay in the Caucasus.

Is there then no way out of these contradictions? We have found two roads no thoroughfare; one remains to be explored. Is it possible that the Caucasus was the scene of *neither* play?

Hitherto everybody has assumed, as the one fixed fact, that the scene of the Prometheus Loosed lay in the Caucasus. Let us examine the grounds of this conviction.

The chief proof lies in the third fragment of the play—the speech of Prometheus already alluded to. This speech has been transmitted to us by Cicero (Tusc. II 10) in a Latin version avowedly made by himself. It is introduced by the words ‘has igitur poenas pendens, *adfixus ad Caucasum*, dicit haec.’ In the text of the speech itself, at the end, the Caucasus is named as the scene of the action. The words are:

‘e quo liquatae solis ardore excidunt  
guttae, quae saxa assidue instillant *Caucasi*.’

Prometheus's gore is melted by the sun, and falls in drops upon the rocks.

This mention of Caucasus, imbedded in the text of the play, seemed final and decisive. It would be so if this were the text of Aeschylus himself. But herein lies, in my view, the gist of the whole matter. These verses are not Aeschylus, but *Cicero's version of Aeschylus*. Cicero supposed, as every one supposed in his day, that the Caucasus was the scene of Prometheus's punishment. What if the mention of Caucasus is due to him, and the *saxa Caucasi* were, in the original, simple nameless *πέτραι*?

Cicero as good as tells us (in the following chapter) that this translation was made by him, as an exercise in verse-composition, while he was a student in Athens. We do not know whether he translated the whole play, or only this passage. But there is nothing in the nature of the case to render such a freedom as I have supposed unlikely. It is only what the makers of poetical translations always do. Cicero's other translations from Greek poets afford many examples of analogous additions.<sup>1</sup> And, as it

<sup>1</sup>An insight into Cicero's usage is easily obtained by comparing his translations from Aratus and Homer (conveniently put together at the end of several of our editions) with the originals. Added epithets are common: *tempestas laeta*=*ἡματι* (Odys. i 363), *duro saxo*=*λάαν* (Il. B 319), *splendenti corpore virgo*=*παρθένον* (Arat. 97). This is the least of many sorts of padding which are

happens, we have an indication that this particular version was not an exact and literal rendering of the original text. The sixth verse of the passage, *Iovisque numen Mulciberi adscivit manus*, is obviously a translation of Prometheus's words to Io in the *Prometheus Bound* (619), βούλευμα μὲν τὸ Δίον, Ἐφαίστου δὲ χεῖρ. We cannot suppose that Aeschylus used this phrase twice in the same trilogy; it is clear that Cicero embellished his translation from the *Prometheus Solutus* with an effective bit from the *Prometheus Vincetus*.

This passage set aside, nothing remains that can be said to prove that the scene of the *Prometheus Unbound* was the Caucasus. That Cicero says *adfixus ad Caucasum* in introducing his version, can count for nothing. Nor is it any more conclusive that Strabo (p. 183) in the words introducing the tenth fragment, says that it occurs in a passage in which Prometheus describes to Heracles the route from *Caucasus* to the Hesperides (καθηγούμενος Ἡρακλεῖ τῶν ὁδῶν τῶν ἀπὸ Κανκάσου πρὸς τὰς Ἑσπερίδας). These expressions may perfectly well reflect the ideas of Cicero and Strabo, not of Aeschylus. For by 'Caucasus' they mean simply 'the scene of the play.' It never occurred to them that this scene could be other than Caucasus. Still less can the mention of the Phasis in Fragment I be a proof. This and Fragment II are part of the parodos. Fragment II belongs in order between the parts of I. The chorus of Titans announce their presence to Prometheus, and describe their journey. Three places are named in the scraps we have: the Red Sea, the παντοτρόφος λίμνη (=the Fountain of Helios, where the sun rises), and the Phasis. But there is nothing to show that the Phasis was at or near the end of the route. A dozen other places, for aught we know, may have followed it

freely employed. Thus, βοῶν ἀροτήρων (Arat. 132) becomes *manu vinctum domitumque iuvencum*, καλὰ φαίνει (Arat. 148) becomes *tremulum quatiens e corpore flammam*, πέλωρ (Arat. 205) becomes *iubam quatiens fulgore micanti*, κριοῖο (Arat. 225) becomes *contortis aries cum cornibus*. Whole verses are thus put in bodily: thus at Arat. 27, 82, 277, 308, 339 (of the Greek text). Two whole verses, of which there is no trace in the original, are inserted after Arat. 360. An extreme case is Arat. 286, where one verse is padded into four. These additions sometimes include proper names: *poena satiabit Achivos* (Il. B 329), *Neptunia pistrix* (=ἡΐτεος, Arat. 647), *Arcturo . . . dedit Juppiter* (Arat. 406), *Aegaeo defixa in gurgite Chius* (=Χίωι, Arat. 638); compare Arat. 134, 248, 343. The translation of Sophocles Trach. 1046 ff., in Tusc. II 8 keeps fairly near the original, but even here Ἐχιδνῆς θρέμμα becomes *Hydra generatum*, and ἀφράστῳ πέδιλῳ πεste textili.

in the enumeration. The route, so far as it is indicated, corresponds roughly with Io's route from Prometheus's standpoint to Egypt, as described in the preserved play—except, of course, that it is in the opposite direction.

We see that there is no cogent evidence that the *Προμηθεὺς λυόμενος* was enacted in the Caucasus, unless we regard as such the belief of Cicero and Strabo, who had the play before them, and the consensus of antiquity generally that Caucasus was the place of Prometheus's punishment. The universality of this belief influenced Welcker strongly. But it proves too much. It pertains to the Prometheus Bound as well as the Prometheus Loosed—to the beginning as well as the end of the punishment. Lucian, for instance, in the dialogue 'Prometheus' travesties the opening scene of the *Προμηθεὺς δεσμώτης*, and designates the place as Caucasus. Were the *δεσμώτης* lost, we should accept this as evidence that its scene lay in the Caucasus; yet we know it did not. Other places where the *beginning* of the punishment is referred to the Caucasus are Cleanthes quoted in Plutarch de fluviis 5, 3 (*προσέδησεν αὐτῷ τὸν Προμηθεά*), Arrian Peripl. Eux. II, 5 (*ὡς περὶ ὃ Προμηθεὺς κρεμασθῆναι ὑπὸ Ἡφαίστου κατὰ πρόσταξιν Διὸς μυθεύεται*), Schol. Prom. 347 (*τὸν Προμηθεά προσήλωσεν ὁ Ζεὺς εἰς τὸ Κανκάσιον ὄρος*). Even the Hypothesis of the Prometheus Bound places the action in the Caucasus: *ἡ μὲν σκηνὴ τοῦ δράματος ὑποκεῖται ἐν Σκυθίαι ἐπὶ τὸ Κανκάσιον ὄρος*. We see that the whole thing hangs together. Both plays were equally thought to have their scene in the Caucasus. In the case of the first play this belief was certainly wrong, and there is no reason to think it was right in the case of the second. Men read their Aeschylus by the light of the current form of the story, learned at school and propagated by many later poets, and they read into him what was not there.<sup>1</sup> The mistake was the easier, as the actual scene of the plays was somewhat vaguely indicated by the poet.

<sup>1</sup> There is a trace of the contrary (and correct) doctrine in antiquity. I mean the supplementary remark in the Mediceus (*ιστέον δὲ ὅτι*, etc.) printed in our editions after the Hypothesis. There were those, even among the ancients, who read the play attentively. It is just possible that a further trace of this right view may lurk in a fragment of Varro's satire 'Prometheus Liber' (n. 4 Riese):

mortalis nemo exaudit, sed late incolens  
Scytharum inhospitalis *campis* vastitas,

in which I would call attention to the word *campis* (not *montibus*). Ribbeck guesses that these lines may be taken from Accius's Prometheus.

Both plays, then, had the same scene, and that scene was *not* intended by the poet to be the Caucasus mountains, but a nameless part of Scythia. I hope I have succeeded in making this as clear to others as it is to me. I regard the conclusion as certain, because it is the only one which does not lead to absurdities. A further word may be allowed me about this belief, which possessed the later ancients, that Prometheus was chained in the Caucasus.

The oldest account, in Hesiod, mentions no particular place. Aeschylus fixed it vaguely in the distant north. It is in Alexandrine time that the earliest distinct mention of the Caucasus in connexion with Prometheus meets us. Apollonius of Rhodes makes the Argonauts, on approaching Colchis, hear the groans of Prometheus and see the eagle going to and returning from its meal.<sup>1</sup> Eratosthenes, as quoted by Arrian,<sup>2</sup> also put Prometheus in the Caucasus. Numberless writers then chime in.<sup>3</sup> But although, as I have said, the Caucasus theory is first found distinctly stated by Alexandrines, there is no doubt that it is older than these. This is shown as follows.

In later antiquity the name Caucasus, as is well known, was extended to far eastern mountain ranges, and included the mass now known as Hindu-Kush, the western outliers of the Himalayas, called also Paropamisos by the Greeks. Two rival 'prisons of Prometheus' were shown to travellers, one in the Colchian Caucasus, between the Black Sea and Caspian, and one in the Indian Caucasus—the Hindu-Kush. Now we are told by Eratosthenes, whom Arrian quotes in his *Anabasis* and *Indica*,<sup>4</sup> that this latter location of the Caucasus and of Prometheus dates from Alexander's campaign. The Macedonians in Alexander's suite, the story goes, called this Paropamisos mountain Caucasus, to flatter the

<sup>1</sup>Argonautica II 1247 ff.

<sup>2</sup>Citations given below. Cp. also Schol. Apoll. Rhod. II 1247.

<sup>3</sup>See Strabo 183, 505, 688; Plutarch de fluviis 5, 3; Pausan. V 11, 6; Lucian Dial. Deor. 1; Duris Sam. frag. 19 Müll.; Apollod. Bibl. II 5, 11, 10; Quint. Smyrn. VI 269; Nonnus Dion. II 297; Eustath. on Dionys. Perieg. 663; Schol. Apollon. Rhod. II 1248; Cicero Tusc. II 10, V 3; Vergil Ecl. VI 42; Propert. II 1, 69; Ovid Amor. II 16, 39; Hygin. Poet. Astron. II 15; Seneca Medea 712, Herc. Fur. 1213, Herc. Oet. 1380; Martial Spect. 7, 1, IX 45, 3, XI 84, 9. With special reference to the Colchian Caucasus, Lucian Prom. 1 and 4; Valer. Flacc. V 145. To the Indian Caucasus, Diodor. XVII 83, 1; Philostr. Vita Apoll. Tyan. II 2; Quint. Curt. VII 3, 22. *Scythici vertexes*, Catull. 64, 294 are probably Caucasus.

<sup>4</sup>Anabasis V 3, 1; Indica 5.



monarch's vanity, and seeing a cave, they forthwith dubbed it 'Prometheus's prison,' and declared that this was where Hercules came and shot the eagle. Strabo is even more explicit,<sup>1</sup> though he does not name Eratosthenes. It appears that opinion was divided between the cavern and a beetling precipice crowned by two crags as the actual place of punishment. Anyhow it is evident that Prometheus and the Caucasus were connected in men's minds at the time of Alexander's campaign; else the discovery of this new 'Caucasus' would not have brought with it a new location of Prometheus's punishment. The old Caucasus also, as has been said, continued to be thought of as the place where Prometheus had suffered. The precise point was a peak called *Στρόβιλος*, visible from the sea-coast at points near the Greek settlements in Colchis.<sup>2</sup> This too was a show-place. Pompey, Appian tells us, visited the Colchian Caucasus in the Mithridatic war on purpose to see the spot where Prometheus had been chained.<sup>3</sup> Eratosthenes, whom Arrian and Strabo copy, evidently was clear that this location was the older of the two—that is, that the Colchian Caucasus was fixed on before the Indian Caucasus as the scene of Prometheus's sufferings. Indeed this would be probable, even without direct testimony.

We may then be certain that the notion that Prometheus was bound in the Caucasus antedated the eastern campaign of Alexander. There is reason to think it a good deal older than this. In Sophocles' play called *Κολχίδες* occurred the verse

*ὕμεις μὲν οὐκ ἄρ' ἤϊστε τὸν Προμηθεά ;*

The subject of the play was Jason and Medea, and Welcker surmised, with much probability, that this verse was part of a description of the magic salve (*φάρμακον Προμηθεῖον*) made of Prometheus's blood. This salve is mentioned by Apollonius in the *Argonautica*,<sup>4</sup> and by Plutarch de fluviis (5, 4) as compounded by Medea. If Sophocles represented the Colchian sorceress as collecting drops of Promethean blood, there can be little doubt that he thought of Prometheus as bound in the Caucasus.

It seems, therefore, that the location of Prometheus in the Caucasus took place, so to speak, between Aeschylus and Sophocles—

<sup>1</sup> P. 505.

<sup>2</sup> Arrian, *Peripl. Eux.* II, 5.

<sup>3</sup> Mithridat. 103.

<sup>4</sup> III 850. Add *Propert.* I 12, 9; *Valer. Flacc.* VII 356.

that is to say, about the middle of the fifth century. It is perhaps idle to speculate how it came about. We may, nevertheless, hazard a guess. Pherecydes of Leros produced his mythical history about the time in question. In the second book he treated the story of Prometheus. The one quotation we have from this narrative concerns itself with the parentage of the eagle which tortured Prometheus.<sup>1</sup> It was the offspring of Typhon and Echidna. We are not told that Pherecydes connected Prometheus with the Caucasus. But, oddly enough, we do know that he connected this same Typhon with the Caucasus in treating the Gigantomachia in his first book.<sup>2</sup> Then, too, it is known that Apollodorus's *Βιβλιοθήκη* follows Pherecydes pretty closely in this part, and Apollodorus puts Prometheus in the Caucasus. Putting all together, it seems not unlikely that it was Pherecydes who disseminated this form of the story. It probably came from the Milesian colonies Phasis and Dioscurias, which were close under the western end of the Caucasian range.

FREDERIC D. ALLEN.

<sup>1</sup> Frag. 21 Müller (=Schol. Apoll. Rhod. II 1252).

<sup>2</sup> Frag. 14 Müll. (=Schol. Apoll. Rhod. II 1214): ὅτι ἐπὶ τὸν Κάκασον κατέφυγεν ὁ Τυφῶς διωκόμενος . . . Φερεκύδης ἐν τῇ θεογονίᾳ ἱστορεῖ.

### III.—MODE AND TENSE IN THE SUBJUNCTIVE 'COMPARATIVE CLAUSE' IN LATIN.

In modern languages the clause of imaginative comparison ('as if') ordinarily takes the form of a condition contrary to fact. What is the history of the Latin idiom, by which a similar clause, introduced by *quasi*, *tamquam si*, *ut si* and the like took, except in connection with a past main verb, the present and perfect of the subjunctive?

The explanation generally given is that the Romans conceived the clause as a future condition. A clear statement of this view is to be seen in Allen and Greenough's Grammar, §312, rem.

"Thus the second example above" (viz. *tamquam si claudus sim*, Plaut. As. 419) "is translated *just as if I were lame*—as if it were a present condition contrary to fact; but it really means *just as [it would be] if I should at some future time be lame*, and so is a less vivid future condition requiring the present subjunctive. Similarly *quasi honeste vixerint*" (in *ita hos [honores] petunt, quasi honeste vixerint*), "*as if they had lived honorably*, is really *as [they would do in the future] if they should have lived honorably*, and so requires the perfect subjunctive."

Some countenance for such a view may perhaps be found in occasional sentences like the following: He doth nothing but frown, as one who should say "An you will not have me, choose." Shakespeare, Merchant of Venice, i. 2; Alius accepit fastidiose, tamquam qui dicat "non quidem mihi opus est, sed quia tam valde vis, faciam tibi mei potestatem." Sen. Ben. 2, 24, 3. Still it is difficult to believe that any language that began by conceiving the comparative clause as a true condition should have ended in any other way than by treating it, reasonable exceptions like the above of course apart, as a condition contrary to fact. The regular type in English is seen in the following: Seldom he smiles; and smiles in such a sort, As if he mocked himself, and scorned his spirit That could be moved to smile at anything. Shakespeare, Jul. Caes. i. 2. And in nearly every case that can be found, we are obliged to translate the Latin comparative clause by the same idiom. Even in default of any better explanation, then, the received one is unsatisfactory.

One necessary assumption that is involved in it is, however, of value. It is evident that, in many of the cases actually occurring, the Romans could not have had a true future condition in mind, *e. g.* in a passage in Plin. Ep. 4, 10, 2. Sabina has left an imperfect will. Pliny consults the lawyers, who agree that upon the point in question it is not binding; and then he writes as follows: "But this seems to me a clear oversight on Sabina's part, and I therefore think we ought to carry out what she believed she had written down, just as if she had written it." Now Sabina is dead, and therefore *quasi scripserit Sabina* cannot mean *just as if she should hereafter write it*. The usage, if beginning in the way suggested, must have lost its original meaning early, and become a stereotyped formula. I speak of this for the reason that my own suggestion will involve a similar conception of the stereotyping of a form that once had a full meaning, and I am glad to have warrant for the reasonableness of such a view in the generally received explanation of the construction under examination.

A conceivable second theory, which perhaps has not been suggested in print, is as follows:

The earliest forms for the conclusion contrary to fact may have been, indeed doubtless were, the present and perfect subjunctive. There are still abundant remains of the idiom in Plautus and Terence, and elsewhere. May not the comparative clause have been in the beginning a true condition contrary to fact?

I think not. For, if the Romans so conceived of it, then, when the use of the imperfect and pluperfect to express the idea of contrariety to fact came in, these conditions would have been sure to share the fate of other conditions of the same kind, and we should find the imperfect and pluperfect used in Ciceronian Latin to the exclusion of the present and perfect.

The true explanation, as one can see in advance, should satisfy two demands. The starting-point which it must find for the construction must not be far removed from the starting-point of the subjunctive condition; for a relationship *in some degree* between the clauses *tamquam si*, etc. and the clauses after the simple *si* seems highly probable. On the other hand, the beginnings of the two constructions must not be absolutely identical. *Some separative distinction of conception is indicated by the differing subsequent fates of the tenses*. What starting-point, that will satisfy both conditions, can be proposed for the comparative clause?

So far as I know, the Latin language itself affords no hint, except the probably illusory one already rejected. In such a

case there is but one possible resort, namely, to a comparison of the Latin with one or many of the closely related languages. Let us try Greek, if haply it may serve us.

Translated into Greek, *tamquam si* would be  $\omega\varsigma \epsilon\iota$ . Now this is one of the phrases that introduce the Homeric simile. A certain resemblance is at once obvious. The Homeric simile, then, may be worth looking into.

For the complete and formal clause, the introductory phrases are  $\omega\varsigma$ ,  $\omega\varsigma \delta\epsilon$  and  $\acute{\omicron}\pi\acute{\omicron}\tau\epsilon$ , and  $\omega\varsigma \epsilon\iota$ ; but substantially similar forms of expression are to be seen in relative clauses after antecedents depending upon adjectives and verbs of likening. And with these various forms are also clearly to be reckoned the relative clause attached to a simile.

The mode, in all these clauses except such as are introduced by  $\omega\varsigma \epsilon\iota$ , is sometimes the indicative, sometimes the subjunctive. With  $\omega\varsigma$ , the indicative is a little more frequent than the subjunctive; with  $\omega\varsigma \delta\epsilon$  and  $\acute{\omicron}\pi\acute{\omicron}\tau\epsilon$  the subjunctive is much more frequent than the indicative, though there are many examples of both.<sup>1</sup>

<sup>1</sup>The figures that follow have been made up from the examples as given in Ebeling's Lexicon. But, unlike Ebeling, I have reckoned forms in  $-\epsilon\tau\omicron\nu$ ,  $-\acute{\omicron}\nu\tau\alpha\iota$ ,  $-\acute{\alpha}\tau\alpha\iota$  and  $-\acute{\omega}\sigma\iota$  as indeterminate; and I have even been obliged to take the same view, except in one place, of forms in  $-\epsilon\tau\alpha\iota$ , in deference to  $\kappa\alpha\tau\alpha\beta\acute{\eta}\sigma\epsilon\tau\alpha\iota$  in O 381 (which, in the simile, must be aorist subjunctive, not future indicative) and  $\sigma\tau\acute{\rho}\epsilon\phi\epsilon\tau\alpha\iota$  in M 42 (which, without the possibility of anacoluthon, follows  $\omega\varsigma \delta' \acute{\omicron}\tau' \acute{\alpha}\nu$ ). I further differ from Ebeling in regarding X 262 as of a different nature from the simile. (The formula for this example would be 'A is as true as B is true,' which is not the formula for a simile.)

I count, then, as follows:

After  $\omega\varsigma \delta\epsilon$ , indicatives 13, subjunctives 7 (all without  $\acute{\alpha}\nu$  or  $\kappa\epsilon$ ), indeterminate forms 4.

After  $\omega\varsigma \tau\epsilon$ , indicatives 10 (reading  $\acute{\epsilon}\sigma\tau\acute{\eta}\kappa\alpha\sigma\iota\nu$  in  $\Delta$  433), subjunctives 11 (reading  $\delta\rho\acute{\omega}\rho\eta$ , after Bekker, in II 633), and 1 indeterminate form.

After  $\omega\varsigma \tau\acute{\iota}\varsigma \tau\epsilon$ , indicatives 2.

After  $\omega\varsigma \delta\tau\epsilon$ , indicatives 19, subjunctives (counting  $-\epsilon\tau\alpha\iota$  in M 41 as subjunctive, on account of the presence of  $\acute{\alpha}\nu$ ) 45 (of which 12 have  $\acute{\alpha}\nu$  or  $\kappa\epsilon$ ), indeterminate forms 10. To this count should be added 1 mysterious optative ( $\tau$  384), and 1 indicative with  $\acute{\alpha}\nu$  ( $\kappa$  410), generally explained by editors as due to anacoluthon.

After  $\omega\varsigma \acute{\omicron}\pi\acute{\omicron}\tau\epsilon$ , indicative 1, subjunctives 4 (all without  $\acute{\alpha}\nu$  or  $\kappa\epsilon$ ).

The summary for determinate forms would be as follows: after  $\omega\varsigma$  without temporal conjunction, 25 indicatives and 18 subjunctives; after  $\omega\varsigma$  with temporal conjunctions, 20 indicatives and 49 subjunctives.



This indicative (except in one instance to be discussed later) is of course to be regarded as citing an often-recurring and familiar fact. How is the subjunctive to be regarded, and how the optative, which appears alongside of the subjunctive in the clauses with *ὥς εἰ*?

An exhibit of examples is necessary. In the case of the *ὥς εἰ* clause, I give all that occur in the Homeric poems (see Ebeling's *Lexicon*). In the case of the other clauses, one or two instances for each will suffice.

With *ὥς δέ*, *ὥς τε*, *ὥς δ' ὅτε*, etc.:

*ὥς δ' ἄνεμος ζαῆς ἥϊων θημῶνα τινάξῃ*

.....

*ὥς τῆς δούρατα μακρὰ διεσκέδασ'.* ε 368.

*ὥς δὲ γυνὴ κλαίῃσι φίλον πόσιν ἀμφιπεσοῦσα,*

*ὅς τε εἴης πρόσθεν πόλιος λαῶν τε πέσῃσιν*

.....

*ὥς Ὀδυσσεὺς ἔλκεινὸν ὑπ' ὀφρύσι δάκρυον εἵβεν.* θ 523.

*ὁ δ' αὖτ' ἔπεισεν μελίη ὥς,*

*ἣ τ' ὄρεος κορυφῇ ἔκαθεν περιφαινομένοιο*

*χαλκῷ ταμνομένη τέρενα χθονὶ φύλλα πελάσση.* N 178.

*δαΐε οἱ ἐκ κόρυθός τε καὶ ἀσπίδος ἀκάματον πῦρ,*

*ἀστέρ' ὀπωρινῷ ἐναλίγκιον, ὅς τε μάλιστα*

*λαμπρὸν παμφαίνῃσι λελουμένος Ὀκεανοῖο.* E 4.

*οὐ γάρ σ' οὐδὲ, ξεῖνε, δαήμονι φωτὶ εἴσκω*

*ἄθλων, οἷά τε πολλὰ μετ' ἀνθρώποισι πέλονται,*

*ἀλλὰ τῷ, ὅς θ' ἅμα νηὶ πολυκλήιδι θαμίζων,*

*ἀρχὸς ναυτάων οἷ τε πρηκτῆρες ἔασιν,*

*φόρτου τε μνήμων καὶ ἐπίσκοπος ἦσιν ὁδαίων.* θ 159.

*ὥς δ' ὅτ' ὀπωρινὸς βορέης φορέῃσιν ἀκάνθας*

*ἂμ πεδίον, πυκινὰ δὲ πρὸς ἀλλήλησιν ἔχονται,*

*ὥς τὴν ἂμ πέλαγος ἄνεμοι φέρον ἔνθα καὶ ἔνθα.* ε 328.

With *ὥς εἰ*:

Subjunctive:

(1) *καὶ μ' ἐφίλησ' ὥς εἴτε πατὴρ ὄν παῖδα φιλήσῃ.* I 481.

Optative after secondary tenses:

(2) *οἱ δ' ἄρ' ἴσαν ὥς εἴτε πυρὶ χθὼν πᾶσα νέμοιτο.* B 780.

- (3) Αἴαν διογενὲς Τελαμώνιε, κοίρανε λαῶν,  
ἀμφὶ μ' Ὀδυσσεύς ταλασίφρονος ἵκετ' ἀντή,  
τῷ ἱκέλῃ, ὥς εἴ ἐ βιόωτο μῶνον ἐόντα  
Τρῶες. Δ 465.
- (4) τῷ δὲ μάλιστ' ἄρ' ἔην ἐναλίγκιον, ὥς εἴ ἅπαντα  
Ἥλιος ὀφρυνέεσσα πυρὶ σμύχοιτο κατ' ἄκρης. Χ 410.
- (5) αὐτὰρ ἔπειτα  
ἄψ' ἐπέθηχ', ὥς εἴ τε φαρέτρῃ πῶμ' ἐπιθείη. ι 313.
- (6) δόκησε δ' ἄρα σφίσι θυμός  
ὥς ἔμεν, ὥς εἴ πατρίδ' ἰκοίαιτο. κ 415.
- (7) σοὶ μὲν νοστήσαντι, διοτρεφέες, ὥς ἐχάρημεν,  
ὥς εἴ τ' εἰς Ἰθάκην ἀφικοίμεθα. κ 419.
- (8) βῆ δ' ἔμεν αἰτήσων ἐνδέξια φῶτα ἔκαστον,  
πάντοσε χεῖρ' ὀρέγων, ὥς εἴ πτωχὸς πάλαι εἴη. ρ 365.
- (9) διέτριβε κέλευθα  
τοῖα πέλωρ' ὥς εἴ τις ἀραιῇσι δρυσὶ βαίνοι. H. Merc. 348.

Optative after a primary tense:

- (10) εἰ μὲν δὴ ἀντίβιον σὺν τεύχεσι πειρηθείης,  
οὐκ ἂν τοι χραίσμῃσι βιὸς καὶ ταρφέες ἰοί·  
νῦν δέ μ' ἐπιγράψας ταρσὸν ποδὸς εἴχει αὐτως.  
οὐκ ἀλέγω, ὥς εἴ με γυνὴ βάλοι ἢ πάϊς ἄφρων. Δ 389.  
(ap. Suid. βάλῃ)

Indicative:

- (11) λαοὶ ἔπονθ', ὥς εἴ τε μετὰ κτίλον ἔσπετο μῆλα. Ν 492.

If, now, we were to study the ὥς εἴ constructions by themselves alone, we might, with no forcing, interpret number (10) as Professor Greenough's interpretation conceives the Latin comparative clauses, as follows: I care no more than (I should care) if a woman were to strike me, or a senseless boy. And this conception is made the more natural by the fact that fighting in abundance is yet to come.<sup>1</sup> Example (9) might be interpreted as a similar

<sup>1</sup>It is of course possible that in οὐκ ἀλέγω, directly after the statement "you boast that you have hit the sole of my foot," the real feeling is "it hurt me no more than if . . .," so that the case would only be one of an optative standing after a past tense as the representative of a subjunctive. But the other interpretation seems the more natural. As for a possible claim that all these optatives are in some way examples of the old construction in the condition and conclusion contrary to fact, it must at once be disallowed on the strength of the aorist in (5); for only the present is used in the optative condition contrary to fact in present time (see Goodwin, Moods and Tenses, §438).

conception transferred to a past point of view. But we could less easily, and hardly, as it seems to me, with satisfaction to our sense for probabilities, interpret the other optative clauses as future, as follows: (2) "and they marched as (they would march at some later time) if the whole earth should be consumed with fire,"—or, in easier phrase, "as if the whole earth were to be consumed with fire"; (3) "the shout of Odysseus came to me just now as if the Trojans were to overmaster him, alone among them"; (5) "and he put the huge door-stone back as if he were to put the lid upon a quiver"; (8) "and he set out to ask of each man, stretching out his hand on every side, as if he should sometime be a beggar of long standing." And even if these interpretations, so at variance with the Homeric directness and simplicity of conception, were to be accepted, it seems hopeless to attempt to understand (1) as meaning "he loved me as if a father shall love a son."

Apart from individual difficulties in this or that *ὥς εἰ* clause, however, it is clear that sound method requires that these clauses be studied in connection with the clauses with *ὥς*, *ὥς ὄρε* and the like above. Number 1 is not to be severed from such clauses as the second with *ὥς*, and yet it evidently is not to be severed from its comrades with *ὥς εἰ*.

The true explanation seems to be that the subjunctive in this idiom is the expression of a postulate of the will. By an act of the commanding imagination a case is summoned, for the sake of a comparison to be made, before the fancy of the speaker and hearer (Delbrück, *Syntaktische Forschungen*, I, pp. 65 and 161). The feeling may be illustrated by an English paraphrase, *e. g.*, for the first case with *ὥς*:

Let a gust of wind toss a dry heap of corn: just in that way were the long timbers scattered.

For the second example with *ὥς*:

Let a man fall fighting for his city and people, and let his wife throw herself upon him and bewail him: so pitifully did Odysseus weep.

For the less formal example E 4:

Picture the star of summer glittering above all others after bathing in the ocean stream: flame like this did she kindle from his helmet and shield.

As for the optatives with *ὥς εἰ*, they seem to me, with the exception of (9) and (10) (which will be taken up later) to be representatives of the subjunctive after a secondary tense. This

view is made the more probable by the fact that 1 actually presents us with a case of a secondary tense with an original subjunctive retained after it.

Professor Goodwin, *Moods and Tenses*, §545, explains the matter somewhat differently, regarding subjunctive examples with  $\omega\varsigma \delta\tau\epsilon$  and  $\omega\varsigma \acute{o}\nu\acute{o}\tau\epsilon$  as expressing a general condition, and the examples with  $\omega\varsigma$  as modelled upon these.<sup>1</sup> The difference between this view and Professor Delbrück's is much smaller than might at first thought appear. The general condition in Greek and Sanskrit is itself, in all probability, the expression of an imaginative postulate of the will. The feeling might be paraphrased by the English *let A happen, and B is always found to go with it*. By an act of the commanding imagination, a case is summoned before the fancy of the speaker and hearer. But this is precisely the description which I gave above of the office of the subjunctive in the simile. The difference, then, is not in the nature of the act of the imagination, but in the use made of the imagined case after it is brought upon the scene. In the simile, it is wanted for the sake of a comparison which is to be made; in the general condition, for the sake of a general statement. I should differ from Professor Goodwin, then, only in regarding the two constructions as proceeding from the same starting-point, rather than as starting one from the other. But I should at once (and this is an important part of my own view) concede that the identity in form between the  $\omega\varsigma \delta\tau\epsilon$  clause and the general condition must have led to more or less confusion<sup>2</sup> in the Greek feeling with regard to their relations.

In just the same way I believe that the superficial resemblance between the  $\omega\varsigma \epsilon\iota$  clause and the true condition led to an occasional treatment of the former as if it were the latter. This appears as early as Homer. In example (10) the mode probably expresses a less vivid future condition, as in the case of the sentences from Shakespeare and Seneca cited above, and in the following, from Xen. Symp. 4, 37:  $\delta\mu\omicron\iota\alpha \gamma\acute{\alpha}\rho \mu\omicron\iota \delta\omicron\kappa\omicron\upsilon\sigma\iota \pi\acute{\alpha}\sigma\chi\epsilon\iota\nu$

<sup>1</sup> Monro's Homeric Grammar, §285, 3 (a) places the construction with  $\omega\varsigma$  under the head of an 'unconditional expression of will.' I should judge Mr. Monro's conception of the  $\omega\varsigma \delta\tau\epsilon$  construction to be the same, §289 (2) (a); but it should be added that he seems (see §318 of the new edition) to incline toward the view that the 'quasi-imperative' use of the subjunctive is younger than the 'quasi-future' use, and a derivative of it.

<sup>2</sup> But not to complete confusion; for the indicative after  $\omega\varsigma \delta\tau\epsilon$  and  $\acute{o}\nu\acute{o}\tau\epsilon$  is much more frequent than in any sure form of the general condition.

ὥσπερ εἴ τις πολλὰ ἔχων καὶ πολλὰ ἐσθίων μηδέποτε ἐμπίπλαιο. Such a conception is especially reasonable where the indefinite pronoun is used, and in example (9), for this reason, the mode might well have been the same, even if the main verb had been in the present.

So much for the drift of the construction in the direction of a future condition. For the drift in the opposite direction, namely, that of the conception of the clause as a condition contrary to fact, an example is to be found as early as Homer, viz. in (11) above. The same thing appears in Aesch. Ag. 1201 (θανμάζω δέ σου, πόντου πέραν τραφεῖσαν ἀλλόθρου πύλιν κυρεῖν λέγουσαν ὥσπερ εἰ παρεστάτεις), and in the very common clauses introduced by ὥσπερ ἂν εἴ.

On the Latin side, such a distinction as is made in Greek by using the optative in place of the subjunctive cannot, of course, be detected in the form of the verb, but may occasionally be surmised from the general nature of the thought, as in Quintil. 12, 5, 2 (where the second person expresses the same idea as the indefinite pronoun in the sentence cited above from Xenophon): nam ut abominanda sunt contraria his vitia confidentiae, temeritatis, improbitatis, arrogantiae, ita citra constantiam, fiduciam, fortitudinem nihil ars, nihil studium, nihil profectus ipse profuerit: ut si des arma timidis et imbellibus. The treatment of the clause as a condition contrary to fact, on the other hand, appears in many passages, e. g. Ter. Phorm. 382 (proinde expiscare quasi non nosses); Cic. Sull. 18, 51; Mur. 4, 10; Fin. 4, 12, 31; Fam. 2, 14, 1; 3, 5, 4; 13, 43, 2; Att. 3, 13, 1; Liv. 42, 13, 1; Tac. Ann. 3, 50; Gellius in the old formula for the adrogatio, 5, 19, 9; Servius ad Verg. Ecl. 8, 10; Pompeius, p. 251, 15 Keil (cf. the present in the same phrase in p. 255, 12).

It still remains to point out a certain variation of meaning in the Greek similes, and the position of the Latin comparative clause on this point. The clause with ὥς or ὥς ὅτε brings before the imagination a picture corresponding to an often observed fact. The clause with ὥς εἴ either does this, as in the case of example (1), or it brings before the imagination an act or state conceived only for the individual instance, as in the case of the remaining examples, (2) to (10). With this latter function of the ὥς εἴ clause the function of the Latin comparative clause is absolutely identical. In example (8), for instance, ὥς εἰ πτωχὸς πάλαι εἶη would correspond exactly, not only in meaning, but in grammatical expression, to a *tamquam si iam pridem mendicus esset*, after a past tense like βῆ.



I have now—to recapitulate—touched upon three points which seem to me significant: the exact parallelism in expression, so far as the introductory phrases are concerned, between the Latin comparative clause with *tamquam si* and the like and one form of the Homeric simile; the exact parallelism in meaning between the Latin comparative clause and this same form of the Homeric simile in nine out of the ten cases that occur; and, lastly, the exact parallelism of the two idioms in their abnormal variations. But this form of the Greek simile, when studied as a part of a group of clearly related constructions, appears to be the product of the exercise of the commanding imagination in setting up a picture before the mind. Under this light, I think it probable that we ought to regard the original Latin comparative clause, not as a future condition, nor as a condition contrary to fact, but as a postulate of the imagination not fixed anywhere in time. The original meaning would then have been “imagine things to be so and so; in just the same way . . .” The fact that things *are* not as imagined is of no consequence. The speaker’s conception no more concerns itself with that side of the matter than it does with the same side in the subjunctive concession. When a man says *ita sit: tamen . . .*, or *ita fuerit: tamen . . .*, the thing which he for the moment imaginatively posits is, as he believes, contrary to fact, but that does not hinder him from wholly neglecting this aspect of the matter. “Fancy it as you will,” says he, “yet, whether it is so or not . . .” In just the same way, the earliest meaning of such a sentence as *tamquam si claudus sim, cum fustis ambulandum* may perfectly well have been *fancy me a cripple: that’s the way I have to go around, always with a stick in my hand*.

Beginning thus, the idiom, according to my conception of its history, became stereotyped. Yet its outward identity with the conditional clause led to an occasional treatment of it as such; in which case it of course appeared in the form of a condition contrary to fact, according to the same logic that rules the corresponding idiom in modern languages.

WILLIAM GARDNER HALE.

#### IV.—ΣΚΗΝΑΩ, ΣΚΗΝΕΩ, ΣΚΗΝΟΩ.

##### A CONTRIBUTION TO LEXICOGRAPHY.

The verbs *σκηνάω*, *σκηνέω*, *σκηνώ* have never, to my knowledge, been fully examined. In this article it is proposed (1) to collect all the forms which occur, both of the simple verbs and of their compounds; (2) to assign each form to its proper present; (3) to discuss the meanings.

The collection of forms discloses an interesting fact. The words are confined to a few authors, and of 69 forms which occur in classical Greek, there are 59 in Xenophon. The other classical authors who use these words are Aeschylus (once), Aristophanes (once), Thucydides (three times in the MSS, but probably really twice), Demosthenes (once), Plato (four times). The words are not found in Homer, Hesiod, Sophocles, Euripides, Aristotle, or in the orators, except in the single passage of Demosthenes.<sup>1</sup> In late authors, lexicographers and grammarians I find 43 additional forms, as well as two others in inscriptions, a total of 114 forms in all.

The assignment of the different forms to their proper presents is no easy task. One difficulty arises from the uncertainty of origin attaching to the contracted forms. In fact, when they are considered as mere forms, the only one in the authors which necessarily presupposes a *σκηνάω* is *σκηνώσθαι*; there is no form in itself calling for *σκηνέω*; from *σκηνώω*, however, are formed *σκηνοῦν*, *ἐσκήνου* (3d person impf. act.), *σκηνώσω*, *-εσκήνωσε*, *ἐσκήνωσαν*, *σκηνώσαι*, *σκηνώσας*, *-εσκηνώκατε*, *-εσκηνωκέμαι*, *-εσκηνώκει*, *ἐσκηνωμένος*, *-εσκηνωθήναι*. But the following might be formed from either *-άω* or *-έω*: *σκηνήσουσι*, *σκηνήσειν*, *σκηνήσοιεν*, *ἐσκήνησαν*, *σκηνησάμενος*, *ἐσκήνηται*, etc.; the following from *-έω* or *-όω*: *σκηνοῦμεν*, *σκηνοῦσι*, *σκηνοῦντες*, *ἐσκήνουν*; and from either *-άω*, *έω* or *όω* the subjv. *-σκηνώσι*.

Observing that no form calls necessarily for *σκηνέω*, one might be inclined to say that there is no such word. Still, Thomas Magister recognizes it in the following passage (337, 18 Ritschl):

<sup>1</sup> These statements are based upon the special lexicons to Homer and the tragedians, Dunbar's Concordance to Aristophanes, Essen's Index to Thucydides, Paulsen's to Hesiod, the Index Graecitatis in Reiske's Orators, Ast's Lexicon Platonicum, the Index to the Berlin Aristotle, Keller's Index to the Hellenica, and on my own examination of the other works of Xenophon.

καὶ σκηνὴ καὶ σκῆνωμα παρὰ τῇ θείᾳ γραφῇ· οἱ ῥήτορες δὲ σκηνὴν μόνον γράφουσιν. καὶ σκηνῶ σκηνῶ μόνον παρ' ἐκείνῃ· παρὰ δὲ τοῦτοις σκηνέω σκηνῶ ὡς ἐπιπολύ, ἅπαξ δὲ καὶ σκηνόω σκηνῶ. Ἀριστείδης ἐν Θεμιστοκλεῖ· παρ' αὐτὸν τὸν θάνατον ἐσκηνήσθαι· καὶ πάλιν· ὁμοῦ τοῖς ναύταις ἐσκηνωμένος.

And the Scholiast (Rav.) on Ar. Ach. 69 recognizes three verbs (see below, p. 76). Further, it would be extraordinary if there were formations in -άω and -όω, yet none in -έω, for verbs of this last form are, certainly so far as Xenophon is concerned, far more common than those of the first two. Thus, a count of these verbs in the Anabasis (including compounds) shows 87 in -άω, 26 in -όω, and 247 in -έω. Excluding compounds, the figures respectively are 41, 18, and 125.

That the difficulty of distinguishing the forms was recognized early, Eustathius indirectly testifies (Il. α, p. 70): καὶ τὸ σκηνῶ δὲ σκηνώσω, ἐξ οὗ καὶ σκῆνωμα, καὶ τὸ σκηνῶ σκηνήσω, ἀφ' οὗ οἱ σκηνῆται, διαφορὰν ἔχουσιν φανεράν. It is evident that we must inquire into the distinction of meaning among the different presents before attempting to assign the doubtful forms to their proper verbs.

As the verbs are denominatives, a consideration of the substantives formed from the same root may be useful. The chief is σκηνή. This word means literally no more than 'a shelter.' It denotes in usage something temporary, as a hut, booth, or tent, but these not necessarily intended for soldiers. The same may be said of σκῆνος, σκῆνωμα, cf. κατασκήνωσις, etc. Of course the words are common enough in the sense of a soldier's tent. But we find them also applied to shops and public inns (Becker-Göll, Charikles, II 196), to temporary dwellings for new settlers provided by the old inhabitants of a town (C. I. G. 3137, B. 57=Ditt. Syll. 171, 57), to the theatre building (Ar. Pac. 731, Xen. Cyr. 6, 1, 54). But above all other civil uses the σκηνή, σκῆνος, or σκῆνωμα was most frequently employed at religious festivals and general assemblies, including the great games, in fact at every πανήγυρις. The case is stated in a nutshell by Foucart (sur Lebas, *Voyage Archéol.* I, p. 170):

'Les lois religieuses des Grecs ne permettaient pas d'élever des habitations permanentes dans les enceintes sacrées. Du reste elles auraient été insuffisantes pour la foule que les solennités attiraient. *Tout le monde campaient.*'

This is not the moment to enlarge upon the ancient 'camp-

meeting.' It is enough for the present purpose to say that it was a familiar idea to the Greeks.<sup>1</sup>

One more substantive formed from the root *σκα* must be considered, because in Xenophon it has a peculiar meaning. This is *συσκηνία*. Its proper meaning is of course *a dwelling in the same tent*, and the corresponding word *σύσκηνος* would mean *tent-companion* (Thuc. VII 75, 4). But in Xenophon *συσκηνία* frequently means *a feeding together*. Trieber, in his *Forschungen zur spartanischen Verfassungsgeschichte*, p. 21 ff., has shown how this came about. The words *συσσίτιον* and *σύσσιτος* are ordinarily employed in this second sense. But Trieber points out (p. 15) that *συσσίτιον* in Sparta was the name of a small division of the troops, and that hence Xenophon, in his Lacedaemonian State, cannot use it to signify *feeding together*, and substitutes for it *συσκηνία*, and for *σύσσιτος* uses *σύσκηνος*. Trieber adds that Hippodamus (ap. Stob. Flor. XLIII 93) used *συσκαρίας* in the same Xenophontic sense.

Now of the different uses of the substantives formed from the root *σκα*, three will be found of value in establishing the meanings of the verbs—(1) the military; (2) the religious; (3) the feeding sense, as found in Xenophon. These differences have been ignored by lexicographers. Of the verbs themselves Curtius (*Das Verbum*, I<sup>2</sup>, p. 358) says only this: '*alle drei gut attisch, ohne bestimmte Gebrauchsverschiedenheit.*' In Liddell and Scott's lexicon we find: 'the proper difference of *σκηνέω* (or *-άω*) and *σκηνώω* is, that the former signifies *to be in tents, be encamped*; the latter, *to set up tents, encamp*; though this is not strictly observed.' This is the ordinary distinction found in the older general and in the special lexicons. But in practice the makers of the dictionary seem to have abandoned the distinction altogether, and the result is chaotic, especially in the treatment of the compounds. Vaniček (p. 1055) says: '*σκηνή . . . σκηνάω*,

<sup>1</sup> The following list of citations proves this clearly. It is given here as a contribution to the subject, in the belief that the passages have not before been so fully collected:

Ar. Thesm. 624 and schol.; 658; Pac. 879 and schol.; [Andoc. 33, 9] Xen. Hellen. 5, 3, 19; 7, 4, 32 (cf. 28); Paus. 10, 32, 9; Plut. Alc. 12; Luc. Amor. 12; C. I. G. 1625; 3069, 30; 3071; Ditt. Syll. 189, 11; 125, 28; 362, 2; 388, 34. See also Becker-Göll, Charicles, II, p. 196. For *σκηνοπηγία* applied to the Jewish Feast of Tabernacles, C. I. G. 5361. In this list references are given to substantives and adjectives and not to the verbs *σκηνάω*, etc., as they will be treated below.

*in einem Zelt u. s. w. wohnen, sich aufhalten, niederlassen;* (\*σκῆνος) σκηνώ, *ein Zelt u. s. w. errichten,* = σκηνάω; σκηνέ[σ]ω, = σκηνάω.' These are all the general remarks upon the verbs which I have seen.

What Curtius says (*ibid.*, p. 355) about the interchange and the meaning of verbs in -άω, -έω, and -όω shows how difficult and how often impossible it is to learn the meanings of the different kinds by having recourse to etymological formulae. But in speaking of verbs in -άω he says that they come from noun-stems in α, and get their meanings from these nouns, generally denoting the exercise of some activity or the existence of some state. Taking σκηῆσθαι, the only form which necessarily presupposes a verb in -άω, we might say that it comes from σκηνάω, meaning *to tent, to encamp* (cf. σφενδονάω, *to sling*, ὀριστάω, *to breakfast*, τελευτάω, *to end*). If we found no active form we might say that in this verb the active was never or only rarely used, and might compare μηχανάομαι, σταθμάω, βιάω. If we found active forms we might say that both active and middle or passive were used in the same sense, and might compare πειράω. In this case we should have the right to say that the doubtful forms σκηνήσω, ἐσκήνησαν, etc., might be from σκηνάω as well as from σκηνέω. If, however, we examined the passages in which the doubtful middle or passive forms occurred and found that in all, or practically all, there was a peculiar meaning, and that this was not the military meaning found in the substantives, but the religious, and that the reverse was the case with the doubtful active forms, we might be inclined to say that we were dealing with two distinct verbs, one in -άω, the other in -έω, and that these verbs were carefully distinguished in usage. For instance, cf. Thuc. 1, 89, 3, ἐν αἷς αὐτοὶ ἐσκήνησαν (military), and 2, 52, 3, ἐν οἷς ἐσκήνηντο (religious), passages to be considered more fully below. Now it will appear that this difference actually did exist. Abandoning, therefore, the previous line, I approach σκηνάω from a different point. The active θινάω is transitive, and means *to feast, to entertain*, the middle and passive intransitive, meaning *to feast, to banquet*; so εὐνάω, *to put to bed*, mid. and pass., *to lie abed*; cf. διατάω, διατάομαι (cf. Rutherford, Phrynichus, p. 188), κοιμάω, κοιμάομαι. So if we had a σκηνάω from σκηνή, *a shelter*, it might mean *to put in shelter*, mid. and pass., *put oneself or be put in shelter, tent, camp out, take up one's abode*. Now, these are the meanings which we actually find with all the middle or passive forms, but confined to the civil, and



practically to the 'camp-meeting' sense. The present of the verb, as found in the authors, never means *to be in camp*, or *to dwell*, as Liddell and Scott and Vaníček say. Turning to the authors, we find the compound κατασκηνασθαι in Plat. Rep. 614 E, τὰς ψυχὰς . . . ἀσμέναις εἰς τὸν λειμῶνα ἀπιούσας οἷον ἐν πανηγύρει κατασκηνασθαι, where the meaning is that Er saw the souls camp out as people do at a festival. Here we have the verb in what I have called the religious meaning. A little further along (621 A) we find Er saying of the souls in the plain of Lethe that he saw σκηνασθαι οὖν σφᾶς ἥδη ἐσπέραις γιγνομένης παρὰ τὸν Ἀμέλητα ποταμόν. The same idea is plainly to be understood. Now, there are seven other passages in the authors in which middle or passive forms are found, all of which may come from σκηναόμαι. In the order of tenses first comes σκηνησάμενος, Pl. Legg. 866 D. Here the homicide, if cast ashore on the coast of the country from which he has been exiled, is directed to watch for a ship, σκηνησάμενος ἐν θαλάττῃ τέγγων τοὺς πόδας. This is generally rendered 'having taken up his abode on the shore,' etc. Evidently there is no military sense here; the thought is merely of a temporary shelter, and the word is as likely to be chosen from the use of the σκηνή at festivals as from its employment in military camps. The same participle occurs in the manuscripts of Thuc. I, 133, 1, where the spy on Pausanias is spoken of as σκηνησαμένου διπλὴν διαφράγματι καλίβην; this is rendered 'having prepared for shelter a hut divided by a partition.' This passage has frequently been suspected on the ground that the verb (variously called by editors σκηναίσθαι or σκηνασθαι) is elsewhere intransitive. Even if it were transitive, we have seen that it would not be so in the sense required here, and some correction of the text, like Madvig's σκευασαμένον, must be adopted. In the Republic again (610 E) we find a form, the perfect, and in the neighborhood of the passages already quoted. Of injustice it is said, οὕτω πόρρω πον, ὥς ἔοικεν, ἐσκήνηται τοῦ θανάσιμος εἶναι. Here, too, there is no military reference any more than before; the word means *dwells*, as in Aristides below. We come next to two passages in a late author, Aristides. One of them is referred to by Thomas Magister in the place quoted above (p. 72); in the other the same form ἐσκηνήσθαι appears. In the first (II, p. 246 Dind.) a man is said παρ' αὐτὸν τὸν θάνατον ἐσκηνήσθαι: in the second (II, p. 581) the words are οὐδ' αὐτῷ Ὁμήρῳ ἤρκει παρὰ τὰς ὄχθας ἐσκηνήσθαι τοῦ πατρός. Neither of them necessarily supposes a military use of the word, although the first certainly looks in that direction. It will be remembered

that Thomas Magister (see above, p. 71) took this form from σκηνέω. It is perhaps rather hard on him to use his words towards proving the existence of a σκηνέω and then to suggest that he was wrong in taking this particular form from that verb. Still, we shall find that the real σκηνέω is active and intransitive, and is confined to the military sense. In Aristides the verbs, here *perfect*, not present, mean no more than 'to dwell' (cf. the perf. ἐσκηνωμένος, below, p. 79), the *present* meaning 'take up one's dwelling.'

Next is the form ἐσκηνημένοι in Aristophanes (Ach. 69). The scholiast here says: κέκλιται τὸ ῥῆμα ἀπὸ τῆς πρώτης τῶν περισπωμένων. εἰ γὰρ ἦν ἀπὸ τῆς τρίτης, ἦν ἂν διὰ τοῦ ω, ὡς κεχυσώμενοι.<sup>1</sup> That is, he appears to take the form to be from -άω. It is passive, and means *sheltered*, *screened*, the reference being to the covered carriages used in Persia. Blaydes compares σκηνή in Aesch. Pers. 1000; Plut. Them. 26.

The pluperfect occurs in Thuc. 2, 52, 3, τὰ τε ἱερὰ ἐν οἷς ἐσκήνηντο νεκρῶν πλέα ἦν. Here (and in 2, 17, 1<sup>2</sup>) the meaning is not that persons were quartered actually in the temple buildings, but ἱερὰ means the sacred precincts about the temples, in which people actually camped out at festivals, and ἐσκήνηντο is used in the religious sense (cf. 1, 89, 3, where ἐσκήνησαν is used in the military sense).

This completes my collection of middle and passive forms, and it appears that Liddell and Scott were right in referring them all to -άω, but not exact in the meaning assigned to the present. It will be observed that not one of them necessarily suggests the military meaning of σκηνή. In Hesychius, however, we find in Schmidt's editions σκηνῶντες · σύσκηνοι. λέγονται δὲ καὶ σκηνωταί. We have seen that the active of σκηνάω might be transitive; here it appears to be intransitive. But the manuscript has σκηνόντες, and Schmidt followed Musurus in reading σκηνῶντες. Now, the form σκηνόντες may be Doric for σκηνοῦντες (from -έω), cf. κρατόντες, κοσμώντες, Blass-Kühner, *Ausf. Gram.*, p. 202); or, if we read σκηνῶντες, this also may be Doric for σκηνοῦντες, from -έω or -όω (*ibid.* p. 205). We are therefore dealing here with a dialectic form of -έω or -όω, and not with -άω at all.

It is worth noting that of the ten classical occurrences of the verbs outside of Xenophon, seven have already been treated. I

<sup>1</sup> The form in -όω was the commonest of the three in usage (see p. 83); hence this warning scholion.

<sup>2</sup> οἱ δὲ πολλοὶ τὰ τε ἔρῃμα τῆς πόλεως ᾤκησαν καὶ τὰ ἱερὰ καὶ τὰ ἡρώα πάντα πλὴν τῆς ἀκρόπολεως, κτλ.

shall next examine σκηνώ. Of verbs in -οω, Curtius (*ibid.*) says that in the majority of cases they are formed from adjectival ο-stems, and that they have a causative or factitative meaning, so that we can translate them 'to make something.' With this class we are evidently not dealing now. He adds, 'along with these go others which come from substantives, and have a similar meaning, that of *'bring about something, provide with something,'* e. g. στεφανώω. On this principle σκηνώ should be formed from σκήνος and be transitive, meaning *provide with a shelter, make tent, put into camp.* I find only one trace of this causative sense, and that in Plutarch, μακρὰν ἀπεσκηνώκει τὰ ὦτα τῶν μουσᾶν, 2, p. 334 B. But in its ordinary usage the verb is not causative. Rutherford (Babrius, p. 25) speaks of this and compares ἰδρώω, ῥιγώω, and μεσώω. Even the causative ὑπνώω has sometimes an intr. meaning; cf. also ὁμοιώω, προσομοιώω, ἐξισώω, κατορθώω, χηρώω. Among other verbs in -ώω, κυκλώω is not causative. Another, βιώω, is not causative, and it is very often found with the cognate acc. βίον. Somewhat like this is the well-known place in Aesch. Eum. 634, φάρυς περεσκήνωσεν (cod. M) or παρεσκήνωσεν (dett.). This is the only passage in classical Greek in which the verb in -ώω has an accusative. In all the other passages it is intransitive, and we shall find that it properly means *to tent, camp, camp out, pitch one's tent, and encamp,* the general meaning ascribed to it by Liddell and Scott.

In the classic authors the only forms which necessarily imply a σκηνώ are σκηνοῦν and -σκηνοῦν, ἐσκήνου, -εσκήνωσεν, ἐσκήνωσαν, -εσκηνώκατε. These forms (omitting the Aeschylus passage) occur 16 times. In twelve of them the verb has the meaning *encamp* or *go into quarters*, in the military sense, as follows: σκηνοῦν and -σκηνοῦν, Xen. A. 4, 4, 10; 5, 23; 5, 7, 31; Cyr. 2, 1, 25; 8, 5, 3; Hellen. 7, 1, 38; ἐσκήνου, A. 7, 4, 11; Hellen. 5, 4, 56; -εσκήνωσεν, A. 2, 2, 16; Cyr. 4, 5, 39; ἐσκήνωσαν, Dem. 54, 3; -εσκηνώκατε, Cyr. 6, 2, 2. In one place it has primarily the same meaning, but Xenophon would probably not have used the word here were it not for the idea of *feeding* which we have seen that he attached to the substantive συσκηνία. This is in the Cyr. 6, 1, 49, καὶ νῦν μὲν σε ἀφήμι, ἔφη, σὺν τῇ γυναικὶ δειπνεῖν, αὐθις δὲ καὶ παρ' ἐμοὶ δέησει σε σκηνοῦν σὺν τοῖς σοῖς τε καὶ ἐμοῖς φίλοις. Here δειπνεῖν and σκηνοῦν are practically synonyms. In the other three of the sixteen passages the verb has not what Liddell and Scott call its proper meaning. In these it denotes not an activity but a state of being. That is, it has a meaning which, on Curtius's principle, we might have expected to find with σκηνάω, but did not, and which is

actually and rightly attributed to σκηνέω by Liddell and Scott. Thus in Anab. 5, 5, 11, νῦν δὲ ἀκούομεν ὑμᾶς εἰς τε τὴν πόλιν βίᾳ παρεληλυθότας ἐνίοις σκηνοῦν ἐν ταῖς οἰκίαις, means 'we hear that you have forced your way into the city and are quartered in the houses'; so also the same word in 5, 5, 20. In the third passage the word is used once more with reference to the *feeding* idea in συσκηνία, Cyr. 4, 5, 8, αὐτὸς τε ἐμεθύσκετο μεθ' ὧν περ ἐσκήνου ὡς ἐπ' εὐτυχίᾳ. Hence in thirteen of the sixteen classical passages σκηνέω has the primary idea 'to tent'; in three, 'to be in a tent'; (cf. in this sense μεσόω).

That the former is the proper meaning of the verb is made still more certain by its usage in late authors. In these the forms which must come from σκηνέω are σκηνοῦν, -σκηνοῦν, σκηνώσω, -εσκήνωσε, ἐσκήνωσαν, -εσκήνωσαν, σκηνώσαι, -σκηνώσαι, σκηνώσας, -σκηνώσαντες, -εσκηνώκειναι, -εσκηνώκει, ἐσκηνωμένος, -εσκηνωθῆναι. These forms occur 24 times. In nineteen of the passages the verb has its proper usage and meaning, in four it takes an accusative or is used in the passive with a subject accusative, and in one the form is ἐσκηνωμένος, which must be considered by itself. In not one is it used in the meaning 'to be in quarters, be in camp.' This meaning is assigned by Liddell and Scott to σκηνέω, and it begins to look as if Eustathius was right when he said καὶ τὸ σκηνῶ δὲ σκηνώσω . . . καὶ τὸ σκηνῶ σκηνήσω διαφορὰν ἔχουσιν φανεράν (see above, p. 72). In eleven of the nineteen passages the word means *to pitch one's tent, camp, encamp* in the military sense (with suitable variations for the compounds), viz. -σκηνοῦν, Polyb. 14, 2, 8; 35, 2, 4; Plut. Eum. 15; -εσκήνωσε, Plut. Demetr. 9; Polyb. 10, 31, 5; ἐσκήνωσαν, Poll. 1, 160; -εσκήνωσαν, Polyb. 21, 13, 7; Polyæn. 7, 21, 6; Poll. 1, 160; -σκηνώσαντες, Polyb. 4, 18, 8; 4, 72, 1. In one of the nineteen it means 'camp out' in the religious sense, Ael. V. H. 4, 9, Πλάτων ὁ Ἀρίστωνος ἐν Ὀλυμπίᾳ συνεσκήνωσεν ἀγνώσιν ἀνθρώποις. The remaining seven of the nineteen form a class by themselves, for in them the verb has neither the military nor the religious sense, but means simply *fix one's dwelling, take up one's abode*.<sup>1</sup> The

<sup>1</sup> This is its only meaning in the New Testament and in the Greek version of the Old. I have not chosen to include its Scriptural occurrence in the body of my article, but insert here the following passages, on the authority of Professor Thayer's Lexicon, as the only ones in which the verb is found: Judges 5, 17; Ps. 16, 9; Sir. 24, 4, 8; Matth. 13, 32; Mk. 4, 32; Lk. 13, 19; Jn. 1, 14; Acts 2, 26; 2 Cor. 12, 9; Rev. 7, 15; 12, 2; 13, 6; 21, 3. Neither σκηνάω nor σκηνέω are found in the Scriptures; cf. Thom. Mag. quoted above, p. 71; so Thayer.

first is from an inscription (Ditt. Syll. 126, 3=Hicks 149, 3), σκηνοῦν δὲ τοῦτον καὶ πανηγυρ[ι]ζειν μετὰ τῶν παρ' [ὑμῶν ἀφικομέ]νων καὶ καλεῖσθαι Τήϊον. The inscription concerns the incorporation of the people of Lebedos with the Teians, at the end of the fourth century B. C. Although this passage is very like Plato, Rep. 614 E, οἷον ἐν πανηγύρει κατασκηναῖσθαι, I do not think that the meaning of σκηνοῦν in the inscription is as limited as that of κατασκηναῖσθαι in the Republic. The inscription goes on to state how temporary dwellings are to be provided. The meaning *take up one's abode* is found also as follows: παρασκηνοῦν, Plut. 2, p. 51 E; κατεσκήνωσε, Josephus, A. 3, 8, 5; σκηνώσαι, κατασκηνώσαι, Poll. 1, 73; κατεσκηνω-κέναι, Synesius, Migne LXVI, p. 1179; in Diod. Sic. 14, 32, μετασκηνοῦν means 'remove.'

I come next to the four cases in late authors in which σκηνώω takes an accusative. One has already been mentioned, the only passage in which the verb is causative (Plut. 2, p. 334 B, see above, p. 77). In Polyænus, 7, 21, 6, we find προσεποιήσατο στρατοπεδεύειν, τὰς μὲν μεγίστας καὶ ὑψηλότητας σκηναὶς κατὰ πρόσωπον σκηνώσας, *he pretended to encamp, pitching the biggest and highest tents in front*. In classical authors the phrase would be σκηναὶς πῆξασθαι, so far as we can judge from Hdt. 6, 12 and [Andoc. 33, 9]<sup>1</sup> (cf. σκηνοπηγία, σκηνοπηγέω), or σκηναὶς ἵστασθαι, cf. Xen. Cyr. 8, 5, 3. Polyænus used the phrase on the principle of cognate accusatives. Perhaps he was influenced by the Latin use of *tendere*; though *tentoria tendere* does not occur in the authors, we have *iubet praetorium tendi*, Caes. B. C. 3, 82. Cf. also the cognate accusative in Aesch. Eum. 634 (above, p. 77). The next accusative is in Aelian (V. H. 3, 14), προσέταξε τὰ καπηλεία ἐπὶ τῶν τειχῶν διασκηνωθῆναι, *he ordered shops to be set up along the wall*, where the object has become subject of the infinitive. Last we have in Plutarch (Cam. 31), βιαζομένου σκηνοῦν ἐρείπια, *forcing them to inhabit ruins*. Here is the result of the post-classical use of σκηνώω in the sense of *take up one's abode*. It has become as transitive a verb as οἰκέω.

Out of the 24 passages to be examined there remains one in which occurs the form ἐσκηνωμένος, Aristid. II, p. 277 Dind., ὁμοῦ τοῖς ναύταις ἐσκηνωμένος. Here we might have expected ἐσκηνημένος (see p. 76). Thomas Magister quoted this passage for the very reason that we have in it an unusual form, one he says found

<sup>1</sup> In Plat. Legg. 817 C, σκηναὶς πῆξαντες, the reference is to a tent or booth set up by actors in a tragedy.



nowhere else *παρὰ τοῖς ῥήτοσι*. The fact, which will become more evident as we go on, that *σκηνόω* was by far the commonest verb in late Greek, may account for its usage here. Or its existence may be due to the principle of analogy; the verb *σκηνόω* ought to be causative; it really is so used in one passage in Plutarch; hence the perf. pass. might be thought to mean *provided with a tent*, i. e. *tent* (cf. the passives of *γυμνώω*, *χολώω*, *μυνώω*, *αἱματώω*, and the form *δεδωμάτωμαι*, Aesch. Suppl. 958).

I have now spoken of every form which necessarily comes from *-όω*, and it appears that in the very great majority of cases (32-3, omitting the five places where the verb takes an accusative and omitting also *ἐσκηνωμένος*), the verb *σκηνόω* has what I have spoken of as its proper meaning. It will also be observed that the military sense predominates with this word (26-15). This was far from being the case with the verb in *-άω*.

Examining next the forms which might come from either *-έω* or *-όω*, I find that they occur 33 times. In seven of these the primary meaning is *encamp*; five of the seven are military, and I do not hesitate to refer all seven to *σκηνόω*, viz. *ἐσκήνου*, Xen. A. 3, 4, 35; Cyr. 2, 1, 25; Arrian, A. 1, 3, 6; 3, 29, 4; Josephus, B. J. 3, 7, 17. The sixth is in Plutarch (2, p. 627 A). The words here are: *μὴ μακροῦ οὕτως ἀποσκηνοῦ τῶν ἰδίων*, *don't settle so far afield from where you belong*. I should be inclined here to amend the accent and read the active *ἀποσκήνου*, were it not for two reasons; first, in Plut. 2, p. 334 B (see above, p. 77) the active of this very verb is used causatively; secondly, we had the form *ἐσκηνωμένος* in Aristides (see p. 79). The seventh form is *μετασκηνώ τῆς πατρίδος*, Anon. ap. Walz, Rhett. 3, p. 583, 25; the meaning is *remove* (cf. Diod. Sic., above, p. 79).

In nine of the 33 passages the primary meaning is *be in camp*. It is true that I was obliged to admit (p. 77) that *σκηνόω* had this meaning in three cases. But these nine may be assigned to a different verb, *σκηνέω*, and under it I shall place them. All are military except the last. The first eight are: *σκηνοῦμεν*, Xen. A. 5, 5, 21; *σκηνοῦσι*, Xen. A. 5, 5, 20; *-σκηνοῦσι*, Arrian, Anab. 2, 12, 4; *σκηνοῖεν*, Xen. A. 7, 4, 12; *σκηνοῦντος*, Xen. Hellen. 4, 6, 7; *σκηνοῦντες*, Xen. Cyr. 4, 2, 11; *σκηνοῦντας*, Xen. A. 4, 5, 33; 6, 1, 1. The ninth is in Plutarch (2, p. 735 D): *οἱ δὲ φυλλοχόοι μῆνες ἤδη τῷ χειμῶνι παρασκηνοῦντες*, where the idea resembles *abiding*, not *taking up one's abode*.

Next there are five passages in which I cannot decide between

σκηνέω and σκηνόω. Four are military, and the meaning may be either *encamp* or *be in camp*, viz. ἐσκήνουν, Xen. A. 1, 4, 9; 4, 8, 25; 6, 4, 7; σκηνοῦντες, 4, 4, 14. The fifth is an instance of the 'camp-meeting' use. In the description of the festivities held in the τέμενος which Xenophon dedicated to Artemis (A. 5, 3, 9) occur the words παρείχε δὲ ἡ θεὸς τοῖς σκηνοῦσι ἄλφιστα κ. τ. λ. Here σκηνοῦσι may mean 'to those who were wont to camp out' or to those who were camping out.'

Finally, out of the thirty-three, there are twelve passages, all in Xenophon, in which the verb has the 'feeding' sense. I have already mentioned (p. 77) that this notion was attached to Xenophon's use of σκηνέω in two passages. Therefore, a form doubtful in itself, but which means 'to feed,' should be ascribed to σκηνόω; one which means *be feeding* should be ascribed to σκηνέω. Out of the twelve I give to σκηνόω the forms συσκηνοῦσι, R. L. 13, 1; Hellen. 5, 3, 20; ἔξω σκηνοῖεν, R. L. 15, 4; οἴκοι σκηνοῦντας, R. L. 5, 2; and to σκηνέω the forms συσκηνοῦντων, R. L. 5, 4; C. 3, 2, 25; Hellen. 3, 2, 8; συσκηνοῖεν, C. 2, 2, 1; σκηνοῦντας,<sup>1</sup> Hellen. 7, 4, 36. Three forms remain, compounds of διά. The meaning of all is 'leave the table' (i. e. 'eat through to the end'), and all may be assigned to σκηνόω, viz. διασκηνώσιν, R. L. 5, 3; διασκηνῶν, Hellen. 4, 8, 18;<sup>2</sup> διασκηνοῦντων, C. 3, 1, 38.

This completes my examination of σκηνόω. The forms occur 59 times, of which 26 are Attic, 24 late, 8 in lexicographers and grammarians, and one in an inscription.

I come finally to the forms of σκηνέω. Of verbs in -έω Curtius points out that at a very early period they differed from forms in -άω by being intransitive. We saw that we might have expected σκηνάω to denote the exercise of some activity or the existence of some state; but we found no certain active form of σκηνάω in the authors. We did find σκηναῖσθαι, etc., and, from the peculiarity of its usage, argued that σκηναῖν, had it occurred, might have been found to have the transitive meaning of *shelter*. If we find, therefore, forms such as σκηνήσω and ἐσκήνησα, which might come equally well from -άω or -έω, and if these forms are intransitive, we might

<sup>1</sup> Here Treiber (p. 22, note 1) would read συσκηνοῦντας, a probable improvement. We have seen that the 'feeding' sense may attach to the simple σκηνόω, but this was only when prepositions (σύν and μετά) and their cases, or adverbs (οἴκοι, ἔξω) strengthened the verb.

<sup>2</sup> Here Keller accepts and prints the emendation διασκεύων, which has much in its favor; still one might expect to find διασκηνῶν in his index of words.

refer them to σκηνέω. The following are all such forms that I have found: -σκηνήσω, -σκηνήσετε, σκηνήσουσι, σκηνήσοιεν, σκηνήσειν, ἐσκήνησε, ἐσκήνησαν, -ἐσκήνησαν, σκηνήσαι, -σκηνήσαι, -σκηνήσαντες. Now σκηνέω might mean *be in camp*; cf. στοιχέω, *be in line*, ὀρμέω, *be moored*, οἰκέω, *house*, i. e. *be in a house, dwell*. Or it might mean *encamp*, like αὐλέω, *flute, play the flute*, δειπνέω, *dine*. The future forms occur five times, the aorists sixteen times. Three of the futures have the meaning *will be in camp, will be quartered*, and are military, viz. Xen. A. 4, 7, 27; Hellen. 5, 1, 20 (bis). Another future, σκηνήσω, is mentioned by Eustathius with the remark that it clearly differs from σκηνώσω (see above, p. 72). The fifth has the 'feeding' sense, and means '*will be feeders together*,' συσκηνήσετε, Arrian, Epict. 2, 22, 37; cf. Trieber, p. 22. To σκηνέω I have already assigned nine contracted forms of the present tense (p. 80), meaning *be in quarters*, and all but one military, as well as five similar forms (p. 81) used in the sense '*be feeders together*.' I agree, therefore with Liddell and Scott in giving this verb the meaning *be in camp, be quartered*. But on coming to the forms of the aorist tense it appears that ἐσκήνησαν, for instance, does not mean '*they were*' or '*or had been in quarters*,' but '*they went into quarters*,' '*they encamped*.' Still, this might have been expected, and there is no confusion here between σκηνέω and σκηνώω. The fact is we are dealing with an ingressive aorist. 'The aorist of verbs which denote a state or condition generally expresses the entrance into that state or condition' (Goodwin, M. T. 55).

It is instructive on the difference in meaning between the presents in -έω and -όω that Xenophon says in A. 4, 4, 8 ἔδοξε διασκηνήσαι, but in 4, 4, 10 ἐδόκει οὐκ ἀσφαλὲς εἶναι διασκηνοῦν, not διασκηνεῖν. This difference has not been heretofore noted, so far as I am aware. There is no evidence at all that the meaning '*go into camp*' ever attached to the present tense of σκηνέω; hence the treatment of this verb, and especially of its compounds, in lexicons is erroneous. Returning to the sixteen forms of the aorist, it appears that all are used in the military sense, and all but two are in Xenophon, viz. ἐσκήνησε, Dio Cass. 51, 1; ἐσκήνησαν, Thuc. 1, 89, 3; Xen. A. 2, 4, 14; 4, 2, 22; 7, 3, 15; 7, 7, 1; Cyr. 8, 3, 34; -ἐσκήνησαν, A. 3, 1, 28; 3, 4, 33; 7, 4, 11; Hellen. 4, 2, 23; σκηνήσαι, A. 6, 5, 21; -σκηνήσαι, A. 3, 4, 32; 4, 4, 8; -σκηνήσαντες, A. 4, 5, 29; Hellen. 4, 5, 2.

Finally, there remains the only verbal which I have found, διασκηνητέον, Xen. A. 4, 4, 14. In spite of the lack of an aorist

passive or of any other passive form of σκηνέω, this verbal must be assigned to διασκηνέω on account of the use of this verb just above in the aorist active in the sense of 'encamp apart' (4. 4. 8). This completes my examination of the forms of σκηνέω. They occur 39 times, of which 31 are Attic, 4 in late authors, and 4 in grammarians (Eust. and Thom. Mag.).

I have been unable, in the case of five forms (p. 80), to decide between -έω and -όω. The Hesychian σκηνῶντες was left doubtful also (p. 76). One other form, hitherto unmentioned, I must leave undecided. A Phocian inscription (Foucart, B. C. H. VIII, p. 215=Collitz, Sammlung: Die lokrischen und phokischen Inschr., 1531) runs as follows: εν τοι Φανακίοι θυοντα σκαπεν [γ]υναικα [μ]η παριμε[ν]. The meaning is evidently 'a sacrificer may pitch his tent in the Anakeion; women not admitted.' Here the form σκαπεν may represent either σκαπεῖν, Att. σκηνεῖν (ε=ει), or σκανᾶν, Att. σκηνᾶν (ε=η, then σκανῆν; cf. ἐπιτιμῆν, Wescher-Foucart, 304; ὀρῆν, Blass-Kühner, p. 205). If it represents σκηνᾶν, it is the only active form of this verb; if it represents σκαπεῖν, it is the only place in which the present of this verb means 'pitch a tent, encamp.' I see no way of settling this question, but even if it could be settled it would throw no light on the usage of the forms in Attic Greek. In fact, G. Meyer, Gr. Gr.<sup>2</sup>, p. 51, says 'phokisch σκᾶνῆν=Att. σκηνοῦν (cf. also Roberts, Grk. Epigr., p. 232).

In the following table the occurrence of the forms is summarized:

	Total.	Attic.	Late.	Lex. & Gram.	Inscr.
-άω	9	7	2	...	...
-έω	39	31	4	4	...
-όω	59	26	24	8	1
Doubtful	7	5	...	1	1
	<hr/> 114	<hr/> 69	<hr/> 30	<hr/> 13	<hr/> 2

In closing, something may be said on the general usage of σκηνέω and σκηνοώ in the military sense. In this sense the verbs in the Classics are almost Xenophontic. It will not do to say that the rarity of occurrence in other authors is due to the unimportance of the camp in ordinary Greek campaigns, and that there is nothing surprising in finding the word so often in Xenophon, where camping is constantly mentioned in the long expeditions which he describes. The Greek camp was, to be sure, unimportant, compared to the Roman (Droysen, Kriegsalt., pp. 88, 139,

184); still, camping is spoken of not infrequently. But the regular word used is *στρατοπεδεύω* and its compounds. Thus, Thucydides uses this word (the simple verb) 27 times (Essen), Xenophon himself 29 times in the *Hellenica* (Keller), and 16 times in the *Anabasis*. As an example of late Greek I have noted 32 occurrences in Arrian's *Anabasis* (he used *σκηνώ* twice and *σκηνέω* once). Its compounds, especially of *κατά*, are very common. There is, of course, this difference of meaning, that *στρατοπεδεύω* cannot be used of one man while *σκηνέω* or *σκηνώ* may be used of one or of many. Thus, I have observed only two cases of *στρατοπεδεύω* in the singular in the *Anabasis* (2, 2, 15; 7, 2, 11), but these are no real exceptions, as the subject is a king or general and of course the troops are included (cf. Polyæn. 7, 21, 6). It might seem, however, that *στρατοπεδεύω* could denote an open-air encampment, but *σκηνέω* or *σκηνώ* an encampment only under shelter, in tents or in the houses of a village as quarters. This distinction appears in Xen. A. 4, 4, 7-14. But it is hardly ever preserved. Thus we find *ὑπαίθριοι δ' ἔξω ἐστρατοπεδεύετε*, A. 7, 6, 24, but *σκηνοῦμεν ὑπαίθριοι* in 5, 5, 21. Again, we have *κώμην δὲ δείξας αὐτοῖς οὐ σκηνήσουσι*, 4, 7, 27, but *ἐστρατοπεδεύοντο ἐν κώμῃ*, 3, 5, 1 (cf. 4, 5, 11; 4, 8, 19). In 2, 2, 16 and 17 *κατεσκήνησαν* and *ἐστρατοπεδεύσαντο* are used of the same camp, and for still greater confusion see 6, 4, 1 and 7. We do not, however, find this loose usage in other authors, and it may well be supposed that, in *σκηνέω* and *σκηνώ* Xenophon, who was a real and not a 'play' soldier, was using words which were constantly in the mouths of the men. If we had a Doric literature we might find that these words were preferred by the Spartans.

M. H. MORGAN.



## NOTES.

### THE ETYMOLOGY OF 'FOUR.'

Pedersen, K. Z. 32, p. 272, suggests as the etymology of 'five' (cf. Sanskrit *pañca*, πέντε, etc.) *q'tvōres pen que, i. e.* 'four and one,' comparing 'eleven,' ἐν-νέα and other forms of similar origin. *Sa-hásra* in Sanskrit might be added; compare *que* in *uterque*. This *pen* may perhaps be seen in \**pantvant*, παντ, if (instead of *pant* = *quant*) *pan* = ὅλος *solus unus*! The corresponding *qu*, Sk. *ca*, of *quattuor* had before this been equated by Bugge, B. B. 14, 75 sq., with *que*: *quattuor* = \**duoqet duó-nres* = *duo que duo nares* (Sk. *náras* = men). This etymology makes it necessary to invent a \**qet* in the sense of *que*, for which is no proof. Fick derives the word (Sk. *catvāras* = *quattuor*) from *cat*, to hide, apparently because when one finger is hidden four are visible—a very ingenious explanation. I think the second consonant was originally a vowel, *catu*—τετF. The feminine is *cātasras* with the Rig-Veda form *cātasaras* (5. 35. 2: *cātasarah . . . tisarāḥ*). The form found in composition in the Rig-Veda is *catur*, and in the Atharva Veda *catúr* = *quater*. If we compare the forms for 'three' in Sanskrit we have fem. *tisrās*; and in the genitive of each *tisṛṇām* and *catasṛṇām*. The form *catur* may be *ca-tur*, the *tur* (cf. acc. *catúras*) a variation of the stem *tri* or *ter*, 'three.' Compare Whitney, Gr. 482d. With labialization we find πένυες, *petur*, fi-dvôr, 'four.' One of the Vedic words for 'fourth' is *caturthá*, a form which is found first in the A. V. In the Rig-Veda the only word for 'fourth' is *turíya*. But this adjective did not mean exclusively 'fourth.' Among the Taittirīyakas it is said to have had the meaning 'third,' and hence has to be defined; in the Brāhmaṇas expressly; "*turíyam* is the same as *caturthām*," unnecessary if generally admitted. It must have gone through the process indicated above; \**ca-turíya*, *ca-túras* being parallel. \**Túras* = \**taras* = τρεῖς (compare *pitúr*). The vowel in *catvāras* is not older than the short form; it is hazardous to seek the dual in it. Compare *ketveres*, τέτταρες, Lucil. 97, 121 (Lach.) -ôr, and Hor. 'quattuor ima,' etc. The word 'one' (for which there is no common Aryan sign) must have

been gradually dropped before the *ca*, which, as *cátasras* shows, is here not enclitic (*cá* = *καί*). *Tisrás* stands for *trisasras*, according to the explanation held by Bugge (hence here *trasras*). The meaning ascribed by Bugge to the termination is not certain enough to warrant the assumption that the *-or* of *quattuor* stands for the dual plus *nares, nres*; nor is there much antecedent probability that 'four' was originally expressed by 'two and two men,' although, granted that fingers were called sisters, *\*trisasras* might have meant 'three fingers.' Schmidt holds to an original long vowel in our word, but both stems may at least claim an equal age (see Schmidt, K. Z. 25, p. 43; Wackernagel, *ib.*, p. 283), or rather, the short stem seems more primitive; the long, the result of formal declension. *Catur* and *τέτταρες* are as old as *catvāras* and *fidvōr*. Ennius' *quattōr* is a contracted form.

BRYN MAWR, January, 1892.

E. WASHBURN HOPKINS.

#### NOTES ON THUCYDIDES, BOOK IV.

4, *ἰ ὥς δὲ οὐκ ἐπειθεν οὔτε τοὺς στρατηγούς οὔτε τοὺς στρατιώτας, ὕστερον καὶ τοῖς ταξιάρχουσιν κοινώσας, ἡσύχαζον ὑπὸ ἀπλοίας, μέχρι αὐτοῖς τοῖς στρατιώταις σχολάζουσιν ὁρμὴ ἐνέπεσε περιστάσιν ἐκτειχίσαι τὸ χωρίον.*

Grote says: "Finding himself thus unsuccessful [with the generals], Demosthenes presumed upon the undefined permission granted to him by the Athenian people to address himself first to the soldiers, last of all to the taxiarchs or inferior officers," etc. And Jowett translates: "As neither generals nor soldiers would listen to him, he at last communicated his idea to the officers of division; who would not listen to him either."

But why, one must ask, as has been asked before, should D. communicate with the taxiarchs after the soldiers? To get over this difficulty, it has been proposed to regard the clause *ὕστερον . . . κοινώσας* as explaining that he communicated with the soldiers indirectly only, through the taxiarchs. If this is the meaning, it is very awkwardly put; and would the taxiarchs be the persons to employ for the purpose, seeing that they were not 'inferior officers,' but ranked next to the generals themselves? Perhaps Thuc. wrote *οὔτε τοὺς ταξιάρχους, ὕστερον καὶ τούτοις κοινώσας*. I would explain the introduction of *στρατιώτας* into the text here as arising from the word *περιστάσιν* being (wrongly) understood to mean 'changing round.' With my reading *αὐτοῖς τοῖς στρατιώταις* comes

in, I think, much better; and Demosthenes is cleared from very questionable conduct and Thucydides from an obscure parenthesis.

32, 3 τῶν χωρίων τὰ μετεωρότατα λαβόντες. Cobet shows that καταλαβόντες is required by the sense, and the superlative μετεωρότατα does not occur anywhere else, and indeed is not wanted here. Read then τὰ μετέωρα καταλαβόντες.

36, 3 καὶ οἱ Λακεδαιμόνιοι βαλλόμενοι τε ἀμφοτέρωθεν ἤδη καὶ γιγνόμενοι ἐν τῷ αὐτῷ ξυμπτώματι, ὥς μικρὸν μεγάλῳ εἰκάσαι, τῷ ἐν Θερμοπύλαις (ἐκεῖνοί τε γὰρ τῇ ἀτραπῷ περιελθόντων τῶν Περσῶν διεφθάρησαν, οὗτοί τε ἀμφίβολοι ἤδη ὄντες οὐκέτι ἀντεῖχον). Jowett translates: "For as they perished, when the Persians found a way round by the path, so now the besieged garrison were attacked on both sides and no longer resisted." And Rutherford praises the translator for having seen "the absurdity of the ordinary pointing of this sentence." To me the translation seems impossible. Clearly, the point of the comparison is that in both cases a way round by a path was found. The parenthesis, therefore, must end with οὗτοί τε. But would it perhaps be better, not to strike out τῶν Περσῶν altogether with Stahl, but to regard τ. Περσῶν as a gloss, which has taken the place of τῶν πολεμίων?

40, 2 ἀπιστοῦντές τε μὴ εἶναι τοὺς παραδόντας τοῖς τεθνεῶσιν ὁμοίους. Is it possible that Thuc. wrote ἀπιστοῦντας and not ἀπιστοῦντές τε, or Dobree and Madvig's ἡπίστουν τε? The Greeks generally did not think that in all circumstances the soldier who surrendered was inferior to the soldier who preferred to perish; and the heartless Athenian ally addressed to the prisoner a sort of argumentum ad hominem. The words should rather give the reason why the Lacedaemonians made a point of dying arms in hand.

A. M. Cook.

#### AD EURIPIDIS IPH. TAUR., VV. 1351-3.

De loco vexato necdum emendato Eurip. I. T. 1351-3 pauca quaedam habeo quae referam nova. Mihi enim versum 1352 data opera consideranti omnesque quae in manibus erant eruditorum coniecturas deliberanti ac versibus qui sequuntur diligenter animum advertenti remedium tandem sese obtulit illud, ut mutato versuum 1352-3 ordine lectionem sic constituerem:

οἱ δὲ κλίμακας  
πόντῳ διδόντες τῇ ξένη καθίεσαν  
σπουδῇ τ' ἐσῆγον διὰ χερῶν πρυμνήσια.

Nam versum 1352 haud temere textu qui dicitur movendum esse lucide docent mea quidem sententia verba *εἰχόμεσθα τῆς ξένης πρυμνήσιων τε* (1355-6). Sed hanc sententiam ut integram explicem necesse totam scenam qualem auditori ob oculos ponere voluerit nuntius quoad possim enarrem. Vidit enim navem iam remis rite instructam remigesque ad laborem paratos (1346-8) ac iuvenes Orestem Pylademque ad puppim stantes (1348-9), dum nautae partim contis proram retinent, partim ancoram tollunt, partim scalam in usum Iphigeniae—nam quid adolescentibus agilibus cum tali ad navem praesertim *πεντηκόντορον* escendendam auxilio?—demittunt atque per festinationem *πρυμνήσια* iam iam soluturi sunt (1352-3). Quae conspicati Tauri statim decurrunt et non solum Iphigeniae sed etiam *πρυμνήσις* illis manus iniiciunt (1354-6). Tota iam pictura summatim enucleata restat ut de emendationibus singulis rationem quam brevissime reddam. Conieci igitur confuso ordine versuum 1352-3 verbum *διδόντες* (quam emendationem iam saepius temptatam omnibus notum) in formam *δὲ δόντες* mutatum esse et in versu 1352 participium *σπεύδοντες* coniunctione per ordinis mutationem otiosa facta ex terminationis similitudine illius *διδόντες* praveque intellectis litteris *ΤΕΣ* (*σπουδῇ ΤΕΣ*) ortum esse. Accedit quod hunc in modum constitutis versibus et collocationis verborum eius quae vulgo chiasmus appellatur pulcherrimum habemus exemplum, hoc est: (a) *κόντοισ—πρῶραν εἶχον*, (b) *οἱ δ' ἐπωτίδων ἄγκυραν ἐξανήπτον*, (b) *οἱ δὲ κλίμακας—καθίεσαν*, (a) *ἐσῆγον—πρυμνήσια*; et verba *τῇ ξένη* (qua de probabili emendatione codicum verborum *τὴν ξένην* iam obiter dixi neque est cur longius disseram) et *πρυμνήσια* in versibus qui sequuntur *τῆς ξένης πρυμνήσιων τε* (1355-6) aptissime repetuntur.

MORTIMER LAMSON EARLE.

## REVIEWS AND BOOK NOTICES.

*Studia Biblica et Ecclesiastica.* Essays chiefly in Biblical and Patristic Criticism by Members of the University of Oxford. Vols. II and III. Oxford, At the Clarendon Press, 1890 and 1891. 8vo, pp. viii, 324 and one facsimile; and pp. viii, 325 and five facsimiles.

The second and third series of essays published under the direction of Professors Driver, Cheyne and Sanday, of Oxford University, well maintain the high standard set by the first.<sup>1</sup> They appeal only to scholars. There are in English, besides the recent 'Texts and Studies,' edited by J. Rendel Harris and J. Armitage Robinson, so few publications of this kind, that every encouragement should be given to the editors and promoters of this valuable series. New Testament textual criticism receives the largest share of attention, five of the thirteen articles being concerned with it. Two papers treat patristic subjects; one the Synoptic Problem; two the Canons of the Old and New Testament, and two others the Old Testament.

The first paper is an inquiry, by Dr. Ad. Neubauer, into the Authorship and the Titles of the Psalms according to the early Jewish authorities. Beginning with the Septuagint translators and the Targums down to Immanuel ben Solomon of Rome (Manuelo, the friend of Dante), it brings out clearly the extreme conservatism of Jewish tradition as to the authorship and its entire ignorance of the meaning of the titles of the Psalms. "It is evident that the meaning of them was early lost. Our only remaining resource is the critical method, which, however, on the present subject has as yet made no considerable progress" (p. 57). As might have been expected from its authorship, it is a learned and interesting contribution to a subject which, in former times, has greatly exercised Biblical students. The Hebrew titles to the Psalms were considered as supplying a key not only to the age and authorship of those compositions, but also to the music to which they were chanted, and many a superstructure of ingenious guesswork has been erected on this basis. The Psalms discussed are Nos. 3-9, 16, 22, 32, 33, 38, 39, 42, 45, 46, 53, 56, 60, 69, 70, 75, 77, 80, 81, 87-90, 92, 103, 126, 127.

Mr. F. H. Woods discusses the Origin and Mutual Relation of the Synoptic Gospels (pp. 59-104), without, however, attempting to exhaust the subject in the brief space allotted to him. He tries to show that the original basis of the Synoptic Gospels coincided in its *range* and *order* almost exactly with our St. Mark, excluding, of course, Chapter XVI 9-20. For this he adduces six reasons of varying strength and incisiveness, the accumulative force of which it is almost impossible to withstand. His method is cautious and his statements are guarded. He reaches conclusions which are practically identical with those of Heinrich Holtzmann in his 'Synoptische Evangelien' (Vol. I of 'Handcommentar zum Neuen Testament,' Freiburg, 1889). "There are a

<sup>1</sup> See A. J. P. VII 92-96.



few unimportant passages where it is not unlikely, and yet by no means certain, that St. Mark modified the earlier tradition; one only where it is almost certain that he did so, viz. in the omission of Matth. iii. 7-10, 12; and there are some grounds for thinking that the Marcian tradition (or perhaps we should say St. Mark) originally contained what corresponded to Matth. xxviii. 9, 10, 16-20. We conclude, therefore, that the common tradition upon which all the three Synoptics were based is substantially our St. Mark as far as *matter, general form and order* are concerned. Whether we can go further, and say that in point of language and the more minute details it is generally identical, is a further question which we have not attempted to settle." To add to the merits of his essay, Woods has appended an excellent synoptic table showing the relation between St. Mark and the other Synoptic Gospels. It is one of the best introductions to the comparative study of the Gospels, and throws no small light on the principles of selection which, it is obvious, governed their composition.

C. H. Turner's paper on the Day and Year of St. Polycarp's Martyrdom (pp. 105-55) is a subject which had been treated by Randell in the first volume of these studies and by the late Bishop Lightfoot in his great work on Ignatius and Polycarp. The paper is acute and ingenious, and offers an alternative to Lightfoot's 23d February, 155, in the 22d February, 156 A. D. The whole argument depends on the not improbable assumption that 'the great Sabbath' belongs to Purim, and the author's idea is that 156 was a leap-year, that the extra day was intercalated at the beginning of Xanthicus, giving it two seconds as well as its (normal) two firsts, so that in that year the (first) second of Xanthicus fell on February 22d. Turner also assumes an error in synchronism due either to the original writer or a later scribe from the use of a hemerology which did not indicate the leap-year; hence the textual 23d February. Two appendices treat (1) on a Paschal Homily printed in St. Chrysostom's Works, ascribed by Ussher to A. D. 672, but really belonging to A. D. 387, and (2) passages from ancient writers who employ calendars of the Asiatic type, giving side by side a Roman and a native dating.

The next contribution is an essay by Dr. Bigg on the Clementine Homilies (pp. 157-93). It is a most valuable paper, although the author does not discuss the relation between these and the Recognitions. The real aim is to show that the Homilies were made up of a recast by an Arian Christian of Syriac nationality, turned Ebionite, of an orthodox *Grundschrift*, which formed the original basis of all the Clementine writings (p. 175). The catholic original Bigg dates to about 200 A. D. (p. 183). The recasting was done at some early period in the fourth century. "If we suppose that we have in the present *Homilies* the production of an Arian Christian of Syriac nationality, who fancied that he found in Ebionitism a solution of the great problem—a historical and quasi-philosophical doctrine of the Arian Saviour—we should not perhaps go far wrong. And nowhere could such a man be looked for with more prospect of success than in Antioch" (p. 192).

An excellent article is that of J. M. Bebb on the Evidence of the early versions and Patristic quotations on the text of the books of the New Testament (pp. 195-240). It is less an account of results than of methods and principles, discussing, among others, (1) obvious scribes' errors in the language of

the versions, or misreading of the Greek; (2) corruptions to suit a familiar text, or adaptations to other authorities, and (3) formal changes in style and diction.

G. H. Gwilliam devotes his paper to an account of the Ammonian sections, Eusebian Canons, and Harmonizing Tables in the Syriac Tetraevangelium (pp. 241-72). It was generally known that also the Peshitto MSS exhibit these sections and canons; the printed editions, however, have thus far not indicated these accessories of the text, and very few had an accurate knowledge of them. The argument which the writer develops at the end of his paper (pp. 265-6) from the care the Syrians bestowed on these accessories to their text, to prove the relative originality of the text that underlies the Peshitto, is open to the destructive objections of Dr. Sanday on p. 272.

The closing essay of the second volume is a very acceptable account by Mr. H. J. White of the brilliant series of investigations and studies, carried on especially in the London Academy from 1887 to 1889, which have resulted in restoring to us the history of the great Codex Amiatinus of the Vulgate. Contrary to the view of Lagarde,<sup>1</sup> who dated the codex in the ninth century, White, following de Rossi and Hort, fixes the date to the middle or, at the latest, to the second half of the sixth century. The whole précis was worth giving, and few could have put it together better.

Of the greatest interest for the philologist is Dr. Sanday's note on the Italian origin of the Codex Amiatinus and the localizing of Italian MSS. He discusses with great acumen and thoroughness the list of peculiarities in Late Latinity put forward by Dr. Hamann<sup>2</sup> as marks of Italian origin. Such are *s = x*: *senes* for *senex*, *senia* for *xenia* (*ξένια*). Though there is sufficient evidence of the prevalence of this corruption in Italy, there is also reason to think that it existed in Africa, and there is satisfactory proof of its existence in Gaul. *N* inserted: *gigans*, *optimantium*. In Gregory of Tours we find *accensus* (= *accessus*), perhaps from confusion with *ascensus*. On the whole, the view that this inserted *n* favors an Italian origin seems, if not proved, yet perhaps rather more probable than not. *Cx = x*: *ancxius*, *uncxit*, *sancxit* (Gregory of Tours). The wide diffusion of this usage will not be disputed. There is hardly one of the Latin-speaking provinces from which there is not an evidence for it. *Sub* assimilated before *s* and *ad* before *m*: *sussaltastis*, *ammirata*. Instances of the former assimilation are comparatively rare, and all of Italian origin. The assimilation both of *sub* and *ad* before *m* is more common; so also of *in* before *m*; only once do we find it in Gregory of Tours: *amminiculo*. Taking all the evidence together, a better case appears to be made out than we have as yet had. There is a presumption that the less usual forms of assimilation are Italian. *A = au*: *agusto*, *atem*. The grammarian Caper lays down *ausculta non asculta* (ed. Keil, VII 108), which shows that both forms were current. And if, turning to modern usage, it is argued that the Italian form is 'Agostino,' it may be replied that the Spanish is also 'Agustin.' *O = au*: *clodus* is no doubt the vernacular spelling. Gregory of Tours certainly wrote so, as well as Venantius Fortunatus; it was current also in Africa. *U = au*: the forms *clusi* for *clausi*, *clusum* for *clausum* are also very widely diffused. *A = e*: cf. *adtractaverit* (Codex Amiatinus) and *contractans*

<sup>1</sup> London Academy, Sept. 2, 1882, and Mittheilungen, Vol. I, 191-2.

<sup>2</sup> London Academy, May 7, 1887.

(Gregory of Tours). *E = i*: *redemet* (= redimet). Numbers of such cases might be quoted from the inscriptions or MSS of every region. *Vowel prefixed to s impure*: *histriatarum* (= striatarum). It is not rare in Romance countries. Gregory of Tours has several examples, and noteworthy is the *hispatii* of the Peregrinatio ad Loca Sancta. The converse case of *Spania* for *Hispania* is of frequent occurrence. *S = ex*: e. g. (*e*)*spendebat* and *scandesceat*. Cod. Bezae (D Evv.) offers many analogies, as *sconspectu* = *ex conspectu*. The common view assigns this remarkable codex to the south of France. In favor of this would be the curious form *sonium* (= *μῆρυμα*, Luke 21, 34), which is naturally compared with 'soin.' *Ph = p* and *di = z*: thus *tophadius* (= *topazus*). The dropping of *m* is too common to furnish any criterion. There are many examples in the Spanish and African inscriptions, besides those in Italy. The only books which deal directly with this subject are Sittl's *Lokale Verschiedenheiten der lateinischen Sprache* (Erlangen, 1882) and Max Bonnet, *Le Latin de Grégoire de Tours* (1890).<sup>1</sup>

The third volume followed rapidly upon the second. The contributors are mainly those whose names are associated with the previous volumes.

Dr. Neubauer again opens the series with a paper on the Introduction of the Square Characters in Biblical MSS and an Account of the Earliest MSS of the Old Testament. The Assyrians, we know, were well acquainted with the art of writing as early as the XVth century B. C. The El-Amarna inscriptions, dating about 1400 B. C., make reference to Palestinian cities. The Moabites knew that art in the ninth century B. C., and so the Israelites possessed books in the time of Samuel, and probably used writing with some freedom at a somewhat earlier date. *דען*, the term for the Old Ibri, is derived by Neubauer from a root *d'-g*, to fix in, to engrave, following Epiphanius, who says that the Pentateuch was written 'forma Hebraei *decession*, quod interpretatur: insculptum.' I am surprised to see no notice of de Lagarde's<sup>2</sup> view that *כתב דען* is probably to be interpreted as 'the cuneiform writing,' and *דען* the Hebrew transliteration of Assyrian *dîš* (*dis*), the name of the single perpendicular wedge. This opinion of Lagarde is strengthened by the fact that the Babylonian *Ḥisdai* calls the Old Ibri *ליבונאי* (*Libonai*), which means 'on brick,' perhaps because the Babylonian rabbi knew the Old Ibri characters from inscriptions on bricks. The square characters are called 'Assyrian' because the Jews brought them from Assyria, *i. e.* Mesopotamia.

"The tradition is pretty well established that a new form of writing was introduced after the Exile for copying Scripture, and the early tradition attributed it to Ezra. Now, there is no reason why we should not agree with this tradition of the rabbis and the early Christian fathers. There is in fact nothing else possible but to admit that the Pentateuch (for this book was the first to be multiplied by copies) was simultaneously written in the Old Ibri and in the Aramaic characters before either of them was declared sacred" (p. 13). But is there any positive value to be attributed to this so-called 'tradition'? Mr. Neubauer certainly does not convince us of it. As for the other Biblical books, he says (p. 14): "We believe that they were written in Aramaic characters solely from the beginning, since no early use was made of them in the service of the Temple, and they were not the object of exegesis in the schools

<sup>1</sup> See A. J. P. XII 221.

<sup>2</sup> *Armenische Studien*, p. 154, rem.

of the priests." Very interesting is the author's account of the earliest MSS of the Old Testament, illustrated, as it is, by four admirable photographic facsimiles, enabling those who are not skilled in palaeography to understand the grounds on which, for example, the date of the Codex Babylonicus of 916 is determined.<sup>1</sup>

Canon Gore's exposition of the argument of Romans IX-XI (pp. 37-46) is not satisfactory, owing to its aphoristic brevity. Although ingenious in its character and well written, it leaves the problem as dark as ever.

G. H. Gwilliam's *Materials for the Criticism of the Peshitto New Testament*, with specimens of the Syriac Massorah, are learned prolegomena for a future critical edition, and constitute a valuable addition to our means of ascertaining the relative importance of the Syriac versions. The Karkaphensian version is discussed and further reasons brought forward by the author for his opinion that the Peshitto, and not the Curetonian, represents the 'Old Syriac.' The paper is full of suggestions, and the point seems to be proved that the present Peshitto is not the gradually formed product of several successive revisions.

The next contribution, which is an *Examination of the New Testament Quotations of Ephrem Syrus*, by F. H. Woods (pp. 105-38), has as important a bearing on critical questions affecting the canon and text of the New Testament as Mr. Gwilliam's paper. Mr. Woods shows that while some of these quotations are in exact or practical agreement with the Peshitto, others indicate the existence and use of an extra-Peshitto Syriac text, while a third class point to a direct or indirect use of a Greek text (p. 116 foll.). Ephrem himself may have known Greek, and used a Greek text or a Syriac MS with variant Greek readings, or he may have availed himself of the assistance of a Graeco-Syriac scholar. It is amusing to notice that, following immediately upon Mr. Gwilliam's paper, our author writes: "The Curetonian version is now generally believed to be a fragment of the original Syriac version, and the Peshitto merely a later recension of the same, influenced by what are technically called Syriac readings."

The Text of the Canons of Ancyra is studied by Mr. R. B. Rackham (pp. 139-216). The writer shows that it is impossible at present to get at the original text and that there are great difficulties in coming to an approximate certainty. But he faces these difficulties with the greatest pains and diligence, for which he deserves hearty recognition. He gives a new critical edition of the Greek text of these canons (pp. 142-54), with numerous variant readings and a minute description of the MSS, prefaced by a list of them (pp. 139-42). Then follows an essay (pp. 143-94) containing critical and explanatory notes. Two appendices give the Latin translation of the Syriac and the Armenian versions, the latter kindly made for the author by Mr. Conybeare, of University College, from a MS in his own possession.

Dr. Sanday closes this series with a long study on the Cheltenham List of the Canonical Books of the Old and New Testament and of the writings of Cyprian (pp. 217-303). This list was discovered in the Phillippis Collection at Cheltenham by Professor Mommsen in 1885, and published by him in *Hermes*, XXI (1886), pp. 142-56. The MS itself is of the tenth century, but the list,

<sup>1</sup> Also see *Jewish Quarterly Review*, January, 1892, pp. 317, 318; and *London Academy*, April 2, 1892, p. 328 fol.

according to Mommsen, belongs to the year 359 A. D. Hence its importance. Sanday gives an exhaustive discussion of all the points affecting the canon of the Old and New Testament. He reprints the list from Mommsen's article, reproducing the Latinity and clerical errors of the MS, and then continues with some valuable contributions: (1) To the history of the canon and order of the Old Testament. "Speaking summarily, we may say that the conspicuous features in the Cheltenham List are its points of contact with St. Augustine and its marked coincidence with St. Jerome as to the number of the Books, which may, however, have had an earlier origin" (p. 243); (2) To the canon and order of the books of the New Testament. The salient points of the New Testament list are: (a) the omission of Hebrews and the inclusion of the Apocalypse, points marking this list at once as Western; (b) the abridged list of Catholic Epistles: omitting James and Jude; (c) the order of these Epistles: that (or rather those) of St. John being the first, immediately following the Apocalypse; (d) the order of the Gospels: Matth., John, Luke and Mark; (e) the order of the different parts of the collection: Evv., Epp. Paul., Act., Apoc., Cath. Epp.; (3) Notes on the Stichometries of the Biblical Books, with due reference to the articles of Professor Rendel Harris in A. J. P., 1883 ff., and (4) the list of the writings of Cyprian. It is needless to say that the author's characteristic learning and caution are illustrated on every page. Fresh light is thrown on the history of the Canon, and the five Comparative Tables (pp. 227-32, 254-57, 266-69, 283-87, 299 f.) will be found useful by all students. It is a pity that Sanday, at the time when he published this essay, had not yet seen Mommsen's recent note in *Hermes*, XXV (1890), pp. 636-38: *Zur lateinischen Stichometrie*, in which he discusses the MS of St. Gall, No. 133, also containing this same list of the Books of the Bible and the writings of Cyprian. A comparison of the two lists would have been very interesting and fruitful.

An appendix (pp. 304-23) contains remarks by C. H. Turner on the stichometry of the Cheltenham List and more particularly on that of Cyprian's works. These notes correct and modify somewhat several of Dr. Sanday's statements, and show great judgment and skill.

W. MUSS-ARNOLT.

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*Historische Grammatik der Hellenischen Sprache oder Uebersicht des Entwicklungsganges der altgriechischen zu den neugriechischen Formen, nebst einer kurzen Geschichte der mittleren und neuesten Litteratur, mit Sprachproben und metrischen Uebersetzungen, von Dr. H. C. MULLER, Privatdozent a. d. Universität von Amsterdam. (Erster Band, Grammatik.) Leiden, 1891.*

The title of this book promises more, much more, than could be fulfilled at present. But the book is welcome and suggestive. It is something to be able to register the continuous existence of 'Greek' from 1000 B. C. to the present day. The most obvious criticism is that the 'common' speech is throughout subordinated to the written language or 'Hochsprache,' and that the book partakes too largely of the nature of a special plea for substituting modern Greek, and the modern pronunciation with it, for the ancient Greek in elementary instruction. This special plea and the somewhat extravagant



advocacy of the merits of modern Greek style are a little disappointing in so far as they exclude a complete treatment of the actual ancient forms still extant among the various parts of Greece and Greek-speaking communities from Asia Minor to Southern Italy.

The 'Hochsprache' in modern Athens, with its rapid advance in classicizing itself, may well awaken the sympathy of the civilized world, but, with all due respect for those who use this artificial speech so fluently, it may be urged by conservative critics that it is not yet sufficiently advanced in this formative stage to be made the basis of a recasting of the methods of instruction in other countries.

The 225 pages of Dr. Muller's book contain the following chapters: I (pp. 3-14). Summary of the sources. II (pp. 17-21). The present instruction in Greek. III (pp. 22-25). A transformation of Greek instruction. IV (pp. 26-41). Pronunciation of Greek. V (pp. 42-62). A short summary of the mediaeval and most recent literature as a basis for a historical grammar. VI (pp. 63-74). Historical summary of the grammar. VII (pp. 75-106). Continuation: Inflections arranged in connection with the ancient Greek. VIII (pp. 107-171). The verb. IX (pp. 172-209). Continuation: On the syntax, prepositions, etc. Appendix (pp. 210-225). Corrections and additions.

It would be out of place to take up here the discussion of Parts II and III. In passing, one may object: first, that, for the pupil unacquainted with ancient Greek, modern Greek would be at least as hard to learn as French, German or Italian. Secondly, that when learned it would only be the modern language, with perfection in ancient Greek still in the dim uncertain background. If a thorough mastery of the speech were attained (which is rarely the case with any other modern language in our schools and colleges), the practical use to travelling merchants and archaeologists would be real; but as to the latter, few would be deterred by the pleasant trouble of learning a new idiom on its native soil, and it may be doubted whether many 'mute inglorious Schliemanns' are kept in obscurity by the tyranny of Attic syntax.

Leaving aside, therefore, Parts II and III, we will glance briefly at a few points in the remainder.

The summary of sources (Part I) will be of undoubted value to those interested in the subject. The stress laid upon Winer's *Grammar of the New Testament* and the citations from it are in accord with the writer's idea of leading up from the modern Greek through the *κοινή* to the ancient Greek. The list extends chronologically from Passart's *Neugriechische Grammatik*, 1834 (the year of the removal of the seat of government from Nauplia to Athens), to Krumbacher, *Geschichte der Byzantinischen Litteratur von Justinian bis zum Ende des Oströmischen Reiches* (München, 1891).

Dr. Muller mentions as one of the chief sources for his investigation, and as especially deserving of careful study: 'Die Hellenische Sprache der Gegenwart,' by Aug. Boltz (second edition, Darmstadt, 1882).

In discussing the modern pronunciation of Greek (Part IV) and advising its universal adoption, Dr. Muller admits that for reading Homer the so-called diphthongs *a-i*, *e-i*, etc., would require "eine getheilte Aussprache," both on account of the metre and as a concession to the ancient date. Homer at least still stands intact above the snow-line of Itacism.

The list of authors (Part V) is interesting both from its positive and its negative side. From the seventh to the eleventh century Dr. Muller contents himself with naming one, two, or at most three authors or works for each century. As he remarks, however, the inscriptions, which he has been compelled to leave out of account, should really be included in any complete history of the literature. For what he calls the fifth or 'Roman' period—from the beginning of the Christian era to 500 A. D.—the author calls attention to the necessity of Sophocles' division into 'profane' and 'sacred' literature, tracing the latter, indeed, from the Septuagint version, 283-135 B. C., through the New Testament Greek to Josephus and the late church writers.

The 'Byzantine' period, extending to 1453 A. D., gives, *circa* 1150, the author Theodorus Protoprodrumos, formerly considered as the first modern Greek writer. Under this head Dr. Muller cites several passages from Gibbon's *Decline and Fall*. Thus (in cap. LXVI) Gibbon says: "In their lowest servitude and depression the subjects of the Byzantine throne were still possessed of a golden key that could unlock the treasures of antiquity; of a musical and prolific language that gives a soul to the objects of sense and a body to the abstractions of philosophy." Gibbon then quotes from a certain Philadelphus<sup>1</sup> (Dr. Muller calls him 'Philadelphus') a flattering picture of the learned Greeks of his time (*circa* 1450): "The Greeks who have escaped the contagion are those whom *we* follow, and they alone are worthy of our imitation. In familiar discourse they still speak the tongue of Aristophanes and Euripides, of the historians and philosophers of Athens; and the style of their writings is still more elaborate and correct."

In the 'Turkish' period, from 1453-1821, the classical tradition is finally lost and the barbarized vernacular continues alone. But before the end of this time "the immortal Adamantios Korais" (or Coray, 1748-1833) elevates in every way the language. His work in fixing the character of modern Greek is compared by Dr. Muller to Luther's services to the German language.

The present period of the literature, beginning with 1821, is treated of under the heads of 'Lyrik,' 'Drama' and 'Prose Literature.' Much applause is bestowed upon the style of certain modern writers, but to the student of the genuine modern speech sentences like the following will perhaps be of more interest: "Die meisten dieser Dichter machen zur Zeit einen ausgiebigen Gebrauch von den Volksdialekten, oder von einer gemischten (Volks- und Hoch-) Sprache, welche leider nicht selten für einen Ausländer schwer verständlich ist. Ohne Zweifel wird aus dieser Sprachmischung in der Zukunft eine völlige Einigung entstehen, und die Kluft zwischen der Volks- und der Schriftsprache noch mehr als bisher überbrückt werden" (pp. 57, 58).

Whatever difference of opinion may exist as to the desirability, or even possibility, of "bridging over this chasm between the common and artificial modern Greek," the process is going steadily on. The result outsiders must await. Meanwhile it is of prime importance to collect the historic forms which are gradually vanishing in the face of newspapers, steamboats and railroads, but linger still in remote places on the mainland, the islands of the Aegean, or even, as is pointed out (p. 62), in Calabria and Terra d'Otranto.

<sup>1</sup> Francis Philadelphus, a sophist, a learned Italian, who by a long residence and noble marriage was naturalized at Constantinople about 30 years before the Turkish conquest.

This process of the union between the common and the written speech is still further described in the Appendix to Part VI (p. 72): "Ueber 22000 Wörter, die seit einem Jahrhundert von den gelehrten Griechen gebildet worden sind, hat Stephanos Kumanúdis gesammelt! Dieser Prozess dauert noch fort, und die Sprache wird mit jedem Tage reicher."

Prof. Hatzidakis (Γ. Ν. Χατζιδάκις, of Athens), often referred to by Dr. Muller, calls this written modern Greek "bis auf einen gewissen Grad die Kultursprache des Orients, wie ja auch die Griechen von altersher das Kulturvolk des Orients sind."

The remainder of the book, Parts VII, VIII and IX (pp. 75-209), contains the formal part of the 'Historical Grammar.' It contains paradigms: for (1) the 'Hochsprache' of to-day; (2) 'Volkssprache' of to-day; (3) the Attic 'Schriftsprache'; and (4) 'Homerische Volkssprache' (*sic*).

Many peculiarities of the common speech are given both in the form and meaning of particular words. Observations are made throughout the work to show the change from a synthetic to an analytic character. In treating of the verb, for example, the author says (p. 108): "We can clearly see how the Greek language, formerly synthetic, has now become analytic"; but the germ of this he finds already in ancient Greek in such expressions as *ἀπαρνεόμενος ἔστι* (Hdt. 3, 99), *ἦν γὰρ Περικλέους γνώμη νενικηκῶτα* (Th. 2, 12), *οἳ μοι βεβουλεύκως ἔχει* S. OR. 701 (cf. Kühner, *Ausf. Gram.* II, pp. 35 and 624), and sees in the modern use of the auxiliary verbs *ἔχω*, *θέλω* and *εἶμαι* (= *εἰμι*) the legitimate outcome of this use, quoting from Meisterhans, 'Gram. der Attischen Inschriften,' data concerning the use of the periphrastic forms of the third pers. pl. perf. and plup. in the inscriptions of the fourth century B. C. and earlier. In concluding these remarks he points out that the greatest changes have occurred in syntax, less in vocabulary and declension. The statement (p. 114, note), that "es eine einheitliche Volkssprache natürlich überhaupt in Griechenland nicht giebt," is of importance to foreigners, and while it may not convince conservative 'Atticists' of the desirability of adopting incontinently the 'Hochsprache' as a substitute for ancient Greek, it will at least justify the determination of the educated Athenians to develop and prune their language. Despite the artificiality of the process and the result, the success is already great, and if modern Athens could grow from a poor village of 300 houses in 1834 to a present population of some 90,000, another half-century may see still greater advance in the crystallization of modern Greek forms and syntax. For the present, as Dr. Muller states (p. 117, in treating of the verbs in *ω*), while *all* Attic forms are in use, especially by scholars, this usage is out of connection with the spoken language, "ist nur bei Wenigen beliebt, und artet nur allzu oft in pedantische Ziererei aus." Comparative lists of verbs are given showing the changes in meaning and form: e. g. the change of the *-μι* verbs to barytone *-ω* verbs, etc.

Then follow remarks on the cases and on prepositions. Here again, in connection with the use of the accusative for the genitive, the writer takes occasion to state (p. 190): "dass die Volkssprache jeden Tag mehr analytisch wird, während die Hochsprache durch den Gebrauch der Autoren, durch Kirche und Schule sowohl als durch die Grammatik, immer in ihrem analytischen Laufe gehemmt wird."

In the common speech the accusative is even used on occasion for the nominative.

The second volume of the work is to contain numerous selections of Greek authors. A prospectus of these is given, beginning with the Iliad and Odyssey, to be accompanied by modern Greek translations, and coming down through the classics, the New Testament, Lucian, etc., to the eighteenth century.

F. G. ALLINSON.

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Das lateinische participium futuri passivi in seiner Bedeutung und syntaktischen Verwendung. Grammatische Studie von Dr. JOSEPH WEISWEILER. 146 pp. 8vo. Paderborn, 1890.

Dr. Weisweiler being a teacher in the gymnasia, and being dissatisfied with the treatment of the so-called gerunds and gerundives in the school grammars as well as elsewhere, has, in the book before us, set out to show the insufficiency and incorrectness of all previous theories on this subject, and to elaborate one of his own. He desires to prove that the verbal adjective in *-ndo* denotes primarily an action that is to be accomplished ("eine zu vollziehende Handlung"), and that this form is distinctly passive in its origin and meaning. In his opinion the fundamental error of all recent grammarians from Weissenborn down has lain in their attempt to proceed in the discussion of this form from a 'substantive gerund,' and to develop all actual usages from that beginning. He finds fault with the etymologists because etymology has led them to assign to this form an original active or neuter force, whereas, he asserts, no form of the Latin passive shows more distinctly its passive signification. He stoutly maintains that the way to arrive at the real signification of the verbal in *-ndo* is not to resort to comparative grammar, but to a careful study and comparison of the actual uses of the form in the literature of the language itself.

The first chapter is devoted to a consideration of the names applied to the participle in *-ndus* in its various uses. The term which had always been employed—*participium futuri passivi*—until recent scholars asserted its incorrectness, Weisweiler defends, not because it corresponds exactly to the genius of the Latin language, but because analogy and the system of the Latin conjugation demand a future passive participle, and because the term is just as appropriate to this form as present and future active participle to the forms in *-ns* and *-turus*, and perfect participle to that in *-tus*. In discussing the terms gerund and gerundive, our author combats the view advanced by Weissenborn that the former was only another expression for active, and to our mind successfully. His conclusion is that the term gerund, equivalent to *gerundi modus*, could have meant to the Latin grammarians nothing else than 'Verbalform der Ausführung,' and that they used *gerundia* and *gerundiva* as synonymous with the forms of *modus gerundi*. They had no singular *gerundivum* in the sense of *modus gerundi*, but considered the plurals *gerundia* and *gerundiva* as equivalents. Erroneous ideas concerning the relations of these two words, largely due to Pott, have distorted the real situation. These false ideas are based, apparently, on the supposed derivation of *gerundivum* from *gerundium*, which is impossible, as the proper derivative would be *gerundiale*, and this error has brought with it another, that the gerundive is really a further devel-

opment of the gerund, whereas this latter term designates only a special use of the participle in *-ndus*.

Another chapter has to do with the etymology of the suffix of this participle, and we are cautioned against sacrificing everything on the shrine of comparative grammar, for the meaning of the future passive participle and its syntax lie ready before us in the very earliest remains of the literature, and so clearly that they cannot be obscured by the allied forms of other languages. *Laudandus* has always had a sure and recognized meaning, and how can its syntax be helped by an etymology that either takes away its original meaning and puts in its place an unqualified neuter force; or asserts that the original meaning was exactly the opposite of that which we find it to be in actual use; or artificially separates the gerund and gerundive, caring nothing for the close union existing between them? And all this when the etymology is phonetically wholly uncertain! To-day it can be said, as Tobler said in 1867, in all these etymologies, the same syntactical difficulty remains, namely, the uniting of the active meaning of adjectives in *-undus* with the passive meaning of the gerundive-participle, and of this with the substantive neuter meaning of the proper infinitival gerund. Weisweiler examines the various etymologies at some length, and rejects them on one ground or another, and contents himself with Döhring's standpoint, assuming the suffix *-ndo* as a finished formation—'nec scire fas est omnia'—and finding this a sufficient basis for his syntactical investigations.

As regards the 'time-character' of participles in *-ndus* and *-bundus*, our author thinks that the gerundive suffix *-ndo* is to be considered, so far as form goes, a passive correlative of the act. part. suffix *-nt*, as is shown by the similar way in which both are applied to the stem. *Amans* corresponds to *amandus*, as *monens* to *monendus*. The correspondence between *amant* and the participial stem *amant-*, between *monent* and *monent-*, cannot be wholly accidental, and so in the passive *amandus*, *monendus* stand related to *amantur*, *monentur*. There are difficulties, however, connected with consonantal and *i*-stems which must be explained. While in the passive *leguntur*, *audiuntur* correspond exactly with *legundus*, *audiundus*, in the active we find beside *legunt* and *audiunt* not *legunt-*, *audiunt-*, but *legent-*, *audient-*, and in the passive another common form in *-iendus*, *-endus*. In the active Weisweiler regards *-ent* as the regular ending, and supposes that *-unt* was introduced through analogy with the 3d pers. plur. of verbs like *sunt* and *eunt* which had assumed the *u*-form for other reasons, and also because of the necessity that gradually arose of differentiating this ending from that of the optative-subjunctive and future. Thus *faciens* beside *faciunt* can be explained. For the existence of the double forms *capiendus*, *capiundus* beside *capiuntur*, no phonetic reason can be assigned, as a change from *u* to *e* in this place cannot be made. The occurrence of the two forms must be explained by the hypothesis that they come from different originals. *Legundus* stands in the same relation to *leguntur* as *legendus* to *legentur*. The former must have been originally a proper present participle, which character is still retained in some verbal forms like *oriundus*, *labundus*; the latter appears to have been a real future<sup>1</sup> participle, formed at a time when the old subjunctive began to assume the character of an independent future tense. Support for this view is drawn from the analogy of the participial forms



in *-bundus*. These belong, as regards form, immediately to the passive-middle future in *-bor*, which was originally only a strengthened present, and we can consider *legendus*, *audiendus* beside *legentur*, *audientur*, and *populabundus* beside *populabuntur*, as, morphologically, future participles, of which the latter belonged to a time before the present in *-bo*, *-bor*, had yet assumed a future meaning, and the latter to a time when the subjunctive in *em (am) es* had already begun to assume a peculiar future sense, as opposed to the later form *am as*.

The striking facts that the forms in *-undus* became coincident with those in *-endus*, and that the gerundive-participles in *-andus*, *-endus* of the *a*- and *e*-conjugations, though showing the same time-character as the active participles in *-ns*, still have the idea of necessity, can only be explained by the ever-increasing tendency to a sort of correlation in form and meaning, in the development of the Latin verb system. Hence it was natural that the two forms in *-undus* and *-endus* should come to represent the same idea, when their original meanings—both expressing *actio infecta*, one an action which is being accomplished and the other an action that is to be accomplished—were so closely allied. In this way we can explain the clearly recognizable future idea in the gerundive, as it is allied with or derived from the finite future form. But it must be remembered that the exact process of the combination and the relation between the two forms can only be decided when some agreement has been reached concerning the relation of the forms *legam*, *legas* and *leges*.

This discussion introduces the main question—What meaning and syntactic use has the future passive participle had in Latin? The answer must be sought for in the facts of actual usage, and in Weisweiler's opinion it is that the verbal adjective in *-ndus* is clearly a future pass. participle, that it is the adjectival expression of verbal action as an action related to an affected subject, and to be accomplished. The rest of the book is occupied in showing that the usages adduced as evidence against this statement of the passive meaning of the gerundive-participle do not in fact constitute such evidence; secondly, in explaining the character of the gerundive construction and its relations to the gerundial construction; and lastly, in showing that the idea of 'is to be' ('sollen') inheres in this form as well in its attributive as in its absolute uses. Space does not permit us to follow out all the argument on these points. In regard to the first, it seems that Weisweiler has made out a very strong case in showing that no verb form has preserved a passive meaning more distinctly than the gerundive-participle. Cases where an object is used with the impersonal periphrastic conjugation are ingeniously explained by the analogy of impersonal passives with an accusative and infinitive. The failure to understand that the gerund is the substantive impersonal absolute use of the future passive participle, and the gerundive the adjective personal passive use of the same, accounts, in Weisweiler's opinion, for all the inconsistencies and disagreements in the explanation of the relation of the two. One chapter is devoted to proving that the absolute gerund does not necessitate an original active meaning. It afforded the Romans a means of expressing the simple action of the verb as one to be accomplished. The use of the absolute gerund with an accusative object is explained partly by the nature of the object, which is so often a neuter pronoun, but principally by the close relationship between the gerund and infinitive. This is one of the most unsatisfactory parts of the

work. In his argument to show that there is always a difference between the absolute gerund and the present participle, Weisweiler is more successful. In the last chapter he tries to show that in all cases where this participle is used, there is a distinct reference to future time, more or less vivid, or more exactly to an action to be accomplished, whether this accomplishment actually occurs or not. In this we think he is quite successful, and we quote his last paragraph. "So liegt auch jenen Variationen des 'Sollens' in den verschiedenen Gebrauchsweisen des Verbaladjektivs auf *-ndus* im Lateinischen ein allgemeiner, 'noch unentfalteter Begriff des Müssens' zu Grunde, der Begriff der zu vollziehenden Thätigkeit. Nur die Anerkennung dieser Auffassung der Verbalhandlung ermöglicht zugleich die rechte Einsicht in die mannigfaltige syntaktische Verwendung jener Verbalform und in der Sinn der Bezeichnungen *gerundium* und *participium futuri passivi*." The book may be pronounced a most interesting and stimulating contribution to the literature of this participle, although we by no means believe that the last word has yet been said on this subject.

SAMUEL BALL PLATNER.

Noctes Manilianae sive dissertationes in Astronomica Manilii. Accedunt, Coniecturae in Germanici Aratea. Scripsit R. ELLIS. Oxford, Clarendon Press, 1891. 255 pp.

Robinson Ellis has a remarkable fondness for difficult and neglected authors. In calling attention to Manilius he has added one more to the many services already rendered by him to scholarship. One is almost tempted to paraphrase the title of his latest work by 'the dark passages of Manilius,' for doing which a certain justification might be found in the *Ibis*, v. 63:

Utque mei versus aliquantum noctis habebunt.

Occasional flashes of genius Manilius has, but they do not illumine his whole poem. His muse rarely leaves the earth to soar among the stars, although the stars form his subject. There are a few lines which haunt the memory and which claim a place for themselves beside Lucretius, to whom, however, Manilius is as inferior in poetic fire as he is in sustained enthusiasm. Recent criticism has shown that the last editor, Jacob (1846), erred in attaching supreme importance to Vossianus II, a Leyden MS of the year 1470. A Brussels MS, the Gemblacensis, of the end of the tenth or the beginning of the eleventh century, now claims the first rank, and Ellis, differing from Bechert, shows that the Vossianus II comes next, while the Lipsiensis, Cusanus, and other MSS must occasionally be appealed to, to establish the correct reading. Ellis himself adds many readings from a Bodleian and a Corpus Christi MS, and has collated anew both the Vossiani. In his attempts to restore the text he is for the most part conservative, and, in striking contrast to Bentley, aims to adhere to the ductus litterarum. It would be impossible within the limits of this notice even to glance at the scores of passages on which Ellis has thrown new light, either by a clear recognition of the difficulties in the existent text, a better interpretation, or an improved reading. Much obscurity, of course, remains and will remain, and not all of the arguments advanced carry conviction.

Perhaps Ellis would not have introduced *coniunctim* for *commentum* in Bk. I 84, nor *contextim* in I 756, if he had noticed that Manilius is not fond of adverbs in *-im*, only using, if my observation is correct, the common adverbs *passim*, *cursim* and *vicissim* with *paulatim* and *generatim*. In I 245 Ellis reads with Conington

nos in nocte sumus somnosque in membra *vocamus*.

for *locamus*. This line Bentley thought spurious. There is a great temptation to adopt *vocamus*, but Vergil, A. X 867, has *locare membra*, and Horace, S. II 2, 81, *sopori membra dare*. May we not then, assuming anastrophe, connect *in* with *somnos*? Compare 'Now I lay me down to sleep.' Cramer, 'de Manilii Elocutione,' p. 45, gives some examples of anastrophe after *que*. See Manilius, V 144, *perque dapēs mensasque super*, where the preposition, to be sure, is disyllabic. In I 751 I should prefer to keep *mollior* than to read *mollem de*, giving the line a spondaic beginning. In the first book over .61 of the lines begin with a dactyl. *Lotos ferit*, proposed for *motus serit* in II 41 f., is ingenious, but improbable. *Fervit opus* for *vertit opus* in II 775 seems very likely as an imitation of Vergil, G. IV 169. In II 784 Ellis proposes *captanti* for *cunctanti* (*tractanti*), and in IV 592 *peractum* for *profectum*. In both cases I prefer the MS reading. In IV 778 ff. he reads, with numerous changes from Jacob,

Inferius victae sidus Carthaginis arces  
Et Libyam Aegyptique latus donataque rura  
Cyrenes lacrimis radiato Scorpius arcu  
Exuit.

interpreting *exuit*, to use his own words, "de nimio calore regionum Carthaginis, etc., propter quem qui ibi vivunt radiis icti Scorpionis exuunt se vestibus, nudis corporibus incedentes." One may grant *exuit* the sense of *strip*, but is it not rather bold to use it thus with *arces*? *Eruit*, the MS reading, has been defended by Breiter and may stand, although *irruit* would agree better with *tamen respectat*, which follows. Compare Avienus, II 546, where *urget* is followed by *respicit*. I cannot accept *pulpamenta* for *fundamenta* in V 133. I had thought of *fulcimenta*, comparing Phocas, Vita Vergilii, 27 (said of Terra):

Herbida supposuit puero fulmenta virescens—

but may not *fundamenta* be used in some such sense? Jacob writes *quondam alimenta*. *Quondam mella dedit* would give good sense and be in accordance with one form of the legend.

In V 245, where the Gemblacensis has

nec parce vina recepta  
hauriet emiseris,

Ellis proposes *invergens*. Ennius wrote, Annales 448 (Baehrens), *olli crateris ex auratis hauserunt*, and it seems natural to find in *emiseris* a similar expression. Why not *e mistris* in the sense of *e crateris*, *mistrum* being formed from *misceo*, as *haustrum* from *haurio*? Compare also *mistarius*

(*mixtarius*) used by Lucilius. I am aware that Bentley ridiculed Turnebus for reading *e mystris* (= μύστρον; see *mistra* : *odia*, *mensura*, quoted by De Vit from Gloss. Pap.), and boldly read himself *hauriet e cratere*. I should prefer not to depart so far from the MSS. On pp. 211-16, in an Epimetrum, Ellis gives some conjectures found in a Roman edition of Manilius of the year 1510, which had been added by a scholar of the sixteenth century. Then follow, pp. 218-33, an interesting essay on the name of Manilius and, pp. 234-48, proposed emendations to the Aratea of Germanicus. Into these we cannot enter. The book as a whole is most suggestive and stimulating, and, as one would expect, full of recondite learning.

MINTON WARREN.

La Philologie Classique. Six conférences sur l'objet et la méthode des études supérieures relatives à l'antiquité grecque et romaine, par MAX BONNET, Professeur à la Faculté des Lettres de Montpellier. Paris, C. Klincksieck, 1892. 224 pp.

The first of these 'Conférences' had already been published in the *Revue Internationale de l'Enseignement* for May, 1891. All of them were delivered by Professor Bonnet on assuming the duties of his new chair at Montpellier. Although intended for a special audience, they have an interest for all who have to do with either the secondary or higher education. No attempt is made at a display of great learning, but the illustrations brought in incidentally show that the writer is acquainted with all the phases of his subject. The demands of modern life upon a university are fully recognized, yet it is strongly urged that the classics still offer the best foundation for later study. But the ideal classical teacher must be thoroughly and broadly trained, and himself be able to contribute to science, a thing which amateurs rarely do. The love of truth for him must be the highest end. An aesthetic appreciation of beautiful passages is not enough. His attention must not be confined to a narrow range of writers: he must know Greek and Latin literature and find nothing uninteresting. His vision must also be broadened by a knowledge of kindred disciplines—archaeology and mythology; history, both literary and political; phonetics; grammar and semantics; palaeography and epigraphy; nay, even numismatics and metrology. If he is interpreting a particular author, he must know all the literature bearing upon him, scattered though it be in journals, dissertations and reviews. This latter injunction may bring many teachers to the verge of despair, especially in this country, where it is so difficult to command all the previous literature. And in practice we fancy Prof. Bonnet would abate something from this demand. Whether independence of judgment is fostered by first reading all the previous literature may well be questioned. Some distinguished scholars seem to proceed on the very opposite principle. But that one ought to know where to look for things, and not repeat the discoveries and blunders of previous generations is self-evident. We have only glanced at this suggestive series of lectures. For the information of the reader, we subjoin their several headings:—I. Qu'est-ce que la

Philologie? II. Histoire de la Philologie. III. Grammaire, Rhétorique et Poétique. IV. Histoire et Antiquités. V. Histoire de l'Art et Histoire littéraire. VI. L'Étude des Textes. M. WARREN.

Anecdota Oxoniensia. Classical Series. Part VII. Collations from the Harleian MS of Cicero 2682, by ALBERT C. CLARK, M.A., Fellow of Queen's College, Oxford. With a Facsimile. Oxford, At the Clarendon Press, 1892.

This latest issue in the Classical Series of the valuable Anecdota Oxoniensia opens with a very clear collotype facsimile of a page of the Harleian MS 2682, giving §72-77 of Cicero's pro Milone. In the introduction the age and form of the MS are treated, and an interesting account is given of its history and of the collations previously attempted, most of them lamentably insufficient and misleading. The collation of Gulielmius is, however, defended against the unfavorable opinion of Halm. Graevius, who borrowed the MS in 1688 from the cathedral library at Cologne, and did not scruple to keep it until his death in 1703, styles it sometimes his *secundus*, and sometimes *Coloniensis*. The affinities of the MS are carefully examined, and it is shown to be especially valuable for the pro Milone and the de Imperio Cn. Pompei. E, an Erfurt MS of the XIIth century, is proved to be derived in part from the Harleian. Valuable readings from the latter are then cited and discussed for the following works: De Amic., De Senec., Cicero in Salustium, Sal. in Ciceronem, in Catilinam, pro Marcello, pro Ligario, pro rege Deiotaro, pro Milone—in which oration many glosses are shown to have crept into the text—and de Imperio, obviously copied from a very ancient original and containing many unique and important readings. Then follow collations of these works in the order above mentioned, and of in Verrem, Act. II, Lib. III, based on the text of Baiter and Halm's Orelli. No collation is given of the Epp. ad Fam., as the results of such a collation by Mr. Purser are printed in Prof. Tyrrell's edition of the Letters. If space permitted, interesting examples might be given of readings confirming or refuting the conjectures of scholars. The work certainly forms an important contribution to the critical apparatus of Cicero.

M. W.



## REPORTS.

ENGLISCHE STUDIEN. Herausgegeben von Dr. EUGEN KÖLBING, Heilbronn.  
XIII Band, 1889.

I.—George Lyman Kittredge, Supposed Historical Allusions in the Squire's Tale. Kittredge takes issue squarely with Brandl (Am. J. Phil. XII 118-20) in regard to the supposed historical allusions. The criticism is acute and sustained; its results are summarized by Kittredge himself: "It is impossible, then, to accept the theory of Professor Brandl, not merely because it is antecedently improbable, but because it is inconsistent with the language of Chaucer, and because it is inconsistent with itself. Further, this theory rests upon certain errors in matters of fact. And, finally, it involves a supposition contradicting the relation known to have existed between Chaucer and the Mortimer family. For all that appears to the contrary, the world has been right for the last five hundred years in regarding the Squire's Tale as nothing more or less than a romance."

To the article is appended an Additional Note on Chaucer's Dreme, in which Kittredge—and he is apparently right—accuses Brandl of confounding two of the *dramatis personæ* of that poem.

Arthur Napier, Old English Glosses on Isidore's Contra Judaeos.

F. G. Fleay, Annals of the Career of Nathaniel Field. At the close of the article Fleay says: "No complete or correct account has hitherto been given of the known facts of the career of this graceful writer and great actor. Nearly every statement in Collier's life of him that concerns dramatic history is more or less erroneous."

B. Leonhardt, Bonduca. The History of Bonduca, by some ascribed to Beaumont and Fletcher, by others to Fletcher alone, is here considered mainly with reference to its sources, though the play is also analyzed in full. The story of Bonduca, the Boudicca of Tacitus, the Boadicea of Glover, Cowper, and Tennyson, is related by Tacitus and Dio Cassius. According to these authorities, she was queen of the Iceni, a British tribe, and, after making head for a time against Roman oppression, died in A. D. 61. The accounts of the ancients were transcribed by the chronicler Holinshed, and are also reproduced by Petruccio Ubaldino, whose book, entitled, *Le Vite delle Donne Illustri del Regno d'Inghilterra e del Regno di Scotia*, etc., was published at London in 1591. In the drama the story of Caractacus, separately related by Tacitus and Dio Cassius, is interwoven with that of Bonduca, on the strength of a doubtful identification by Hector Boece, according to which Caractacus was the brother-in-law of Bonduca. A play which preceded that of Bonduca, and to which the latter may have been indebted, is that entitled *The Valiant Welshman*, or the True Chronicle History of the Life and Valiant Deedes of

Caradoc the Great. The similarity resides in the characterization of the British hero, and in that of a subordinate personage, named Gald in *The Valiant Welshman*, and Hengo in *Bonduca*. Leonhardt's results are to the effect that "Beaumont and Fletcher derived the historic material of the drama from the chronicle of Holinshed, and employed *The Valiant Welshman* and *Antony and Cleopatra* for the further development and characterization of certain individuals."

F. Weinthaler, *Something from Educational Experience, a Contribution to the Question of Instruction in Modern Languages*.

The Book Notices include reviews of William Vollhardt's *Influence of Latin Theological Literature on some Minor Productions of the English Transition Period*, Heinrich Krautwald's *Layamon's Brut compared with Wace's Roman de Brut in Relation to the Portrayal of English Culture*, Thomas R. Price's *The Construction and Types of Shakespeare's Verse as seen in the Othello*, and Landmann's *The Times*, No. 31,725, edited as a *Reading Book for Advanced Pupils*. The review of Krautwald's dissertation, by Klinghardt, contains some interesting suggestions regarding subjects for the doctoral thesis. Thus he says: "The usual phonetic (for the most part rather graphic) and syntactical essays are commonly of little furtherance to either the science or the author; the latter is much more likely to derive fruitful stimulus from an aesthetico-literary investigation. . . . But especially suited to candidates for the doctor's degree appears to me the task of painting, by means of detailed researches, the actual (*realen*) background of the chief literary works in as glowing colors and with as much vividness as possible."

In the *Miscellanea* there is printed a *Fragment of an Old English Legend*, from the celebrated MS Cotton Vitellius A XV, by G. Herzfeld, and *Four New Alexander Fragments*, by Karl D. Bülbring.

II.—Max Kupferschmidt, *The Relations among the Manuscripts of the Winchester Annals*. The seven MSS of the O. E. Chronicle, denoted by the first seven letters of the alphabet, are described by Petrie in the first volume of the *Monumenta Historica Britannica*, and by Thorpe and Earle in their editions of the Chronicle. Kupferschmidt's conclusions, after constructing a genealogical diagram of the MSS, are these:

- "1. A is not the original of the Winchester Annals.
2. A and G have each independently derived their contents from a common source  $\alpha$ , since lost.
3. B and C have in like manner derived their material from a common original  $\gamma$ , since lost.
4. D and E have similarly drawn from a lost original  $\delta$ .
5. The lost sources  $\gamma$  and  $\delta$  did not come directly from the ultimate original O, but through an intermediate text o, in which the ultimate original had undergone some changes."

To the foregoing may be added that O, the ultimate original, is regarded as the direct source of x and o; A and G being at a second remove from the original, and the other MSS, except F, at a third remove. F is disregarded, as being a later and abridged compilation.

Leon Kellner, *Sir Clyomon and Sir Clamydes*, a Romantic Drama of the Sixteenth Century. Dyce ascribed the piece to Peele, on the strength of "a MS note in a very old hand." He is supported, according to Kellner, by Ward, Minto and Lämmerhirt, but opposed by Ulrici, Klein, Symonds and Bullen. Kellner examines the external indications of language, prosody and alliteration, and the internal of dramatic technic—plot and characterization—and style. Peele cannot have written *Clyomon and Clamydes* in sober earnest, but it may have been intended as a parody of the chivalrous drama, and in that case Kellner would have less hesitation in attributing it to him.

J. F. Jameson, *Historical Writing in the United States since 1861*. The last lecture in the series of four delivered at Baltimore in 1887 (see *Am. J. Phil.* XII 118). Extracts may give an idea of the author's acumen and breadth: "The tendencies of most of our numerous local historical societies form a counter-current, or rather let me say an eddy, in which ships of ancient timber float placidly round and round in the same little circle, quite unaffected by any general currents whatever. Dominated exclusively by their oldest and most obscurant members, inaccessible to suggestion, and wedded to tradition, the thought of touching anything that occurred since the Revolution, that is, of having anything to do with the most important part of our history, would be to most of them a profound shock. The suggestion to them that American historical work *needs* a change of base, a thorough reorganization, a direction toward a new range of subjects, would almost subject one to the suspicion of atheism." On the other hand, we have cautions like these: "I think it useful, in spite of present tendency, to point out the limitations which must to some extent beset all coöperative or monographic histories alike. Stretched on the Procrustean bed of uniform requirements in respect to extensiveness and general method of treatment, the authors can present only those things which they have in common—abundant and correct information, and acute historical criticism. Many of the finer qualities of the individual are likely to evaporate in the process; much of what is most valuable in individual views and conceptions of history will find no place for itself." And again: "Already increasing numbers of special students of history are frequenting those universities which afford graduate instruction. I do not wish to imitate the Ephesians in the Acts, and shout for about the space of two hours or even for a small fraction of the allotted fifty minutes, Great is Johns Hopkins of the Baltimoreans!, but the fact remains that here are annually gathered together a larger number of graduate students of history than anywhere else in the country."

The longest and most important article in the Book Notices is a review of ten Brink's *Beowulf* by Hermann Möller. It is scarcely too much to say that the review should be read by every student of the book on which it is based. In a notice of Schmedding's *The Residence of Modern Philologists and the Study of Modern Languages Abroad*, a quotation from the book is given: "We allow to antiquity its historical rights; but our real fountain of life and our real bread of life we look for in our own sphere. Yes, we feel wherein we have the superiority over our colleagues, the ancient philologists, in the whole field of our studies and labors being traversed and irrigated by the powerful and life-giving stream of the present."

III.—Julius Zupitza, *The Romance of Athelston*. The text is printed from MS 175 of Caius College, Cambridge, with the variants of the printed editions by Hartshorne and Wright. The poem consists of 812 lines, occupying nearly twelve pages. This is followed by explanatory notes, occupying a little over seventy-one pages. Seldom, if ever, has a greater or more valuable mass of comment for the illustration of Middle English authors been compressed into so small a space. Every student of Middle English poetry will derive instruction from an acquaintance with these pages.

P. Holzhausen, *Dryden's Heroic Drama*. After an introduction, in which the more recent Dryden literature in Germany is chronicled, the paper is occupied with the author's First or Historical Part, which he entitles *Definition of the Heroic Drama, Origin and Evolution of the Heroic Drama in England*, and particularly of John Dryden's Heroic Plays.

G. Wendt, *The English House of Commons*.

The Book Notices have reviews of the fifth edition of Heyne's *Beowulf*, in which E. Koepfel finds many errors; of Gregor Sarrazin's *Beowulf Studies*, which the same reviewer condemns; of the third edition of Zupitza's *Elene*, of Kölbing's *Ipomedon in Three English Forms*, and of Sweet's *History of English Sounds*. In the latter, written by F. Kluge, allusion is made to Sweet's prefatory grumble about the 'inevitable German,' upon which Kluge remarks: "We Germans are far from considering this as an indictment of ourselves, but regard it rather as an indictment of English scholarship. That the latter concedes no place and grants no adequate recognition to the history of the national language and literature is indeed shameful—but not for us."

In the *Miscellanea*, Max Kaluza, who has done so much for the *Romaunt of the Rose*, makes three emendations of passages in that poem.

XIV Band, 1890.

I.—L. Kellner, *On the Textual Criticism of Chaucer's Boethius*. In Morris' edition of Chaucer's *Boece* for the Chaucer Society, he had based his text on Add. MS 10,340 of the British Museum and MS II 3, 21 of Cambridge University Library. Kellner is convinced that the Caxton print of *Boece* is from an independent MS, more closely akin to the second above mentioned than to the first. He gives a long list of divergencies in Caxton from the other two MSS, and recommends a new edition of the *Boece*, using the Salisbury MS and the Caxton print, as well as the two which underlie the Morris text.

E. H. Oliphant, *The Works of Beaumont and Fletcher*. Fleay and Boyle, besides a Mr. Macaulay, have of late been trying to discriminate between the work of Beaumont and that of Fletcher. These two students have employed somewhat different tests. The present writer employs still others, coming to independent conclusions before consulting his predecessors, and then checking and correcting his results by theirs. After characterizing Fletcher, Beaumont and Massinger, and their writing, Oliphant proceeds to an examination of the following plays: *The Woman-Hater*, *Love's Cure*, *The Faithful Shepherdess*, *Cupid's Revenge*, *The Coxcomb*, *The Knight of the Burning Pestle*, *Philaster*, *A King and No King*, *The Maid's Tragedy*, *The Captain*, *The Masque of the Inner Temple*.

H. Klinghardt, *The Genetic Explanation of the Expressional Forms* (Ausdrucksformen) of Language in Teaching. By 'expressional forms' the author understands the typical combination of two or more words. Of these he makes two classes: (a) general, constructional, or syntactical; and (b) individual or phraseological. The former head includes constructions which are amenable to the ordinary laws of grammar, the latter comprises what are commonly understood by 'idiomatic phrases.' Klinghardt's recommendation is that the latter should not be learned *en bloc*, as it were, in the acquisition of a foreign language, and conceived of merely as the equivalent of certain other phrases, idiomatic or otherwise, in the native tongue, but that, so far as practicable, the force of the various elements which compose the phrase shall be ascertained, and the idiom built up in the mind so as to be intelligible in all its parts as well as in its entirety. The same principle should also be observed, *mutatis mutandis*, in teaching the constructions which belong under the first head.

In the Book Notices, Lauchert's *Geschichte des Physiologus* is criticised by M. F. Mann, on the ground that it contains little that is new, that its author does not give due credit to his predecessors, that he has not consulted all the existing literature, that his knowledge of the manuscripts is superficial, that his book lacks a bibliography—in fine, that, with some merits, it does not deserve to rank as standard. To the foregoing Lauchert appends a note confessing some of his omissions. Emil Koepfel reviews Flügel's Sidney's *Astrophel and Stella* and *Defence of Poesie*, and, with comparatively slight reservations, praises it. Among other works noticed are Breymann and Wagner's edition of Marlowe, Sommer's *First Attempt at English Pastoral Poetry*, and Uhlemann's *The Author of the Commentary on Spenser's Shepherd's Calendar*.

II.—M. Kaluza, *Minor Publications from Middle English Manuscripts*. I. *The Eremyte and the Outlawe*. This is a ballad of 387 lines, published from Add. MS 22,577 of the British Museum, with introduction and notes. The original MS was in possession of William Fillingham, but has since disappeared. This poem was copied out by Fillingham, who in 1806 presented it to Philip Bliss, then of St. John's College, Oxford, and afterwards Principal of St. Mary's Hall. Kaluza gives an abstract of the contents, decides that the dialect is Midland, and dates it approximately in the first half of the fifteenth century. The poem is written in tail-rime strophes of twelve lines each, with the rime-arrangement *aab ccb ddb eeb*. Alliterative formulas are frequent; formulas consisting of synonyms or antonyms connected by a conjunction are less common; such, for example, as *dep and wyde, thys myrthe and thys solempnite*.

F. Lauchert, *The Influence of the Physiologus upon Euphuism*. Euphuism, as is well known, employed a vast number of similes, largely drawn from an imaginary natural history. Its founder, Guevara, has but few such similes in his works, but in Lyly they already abound. Pliny has been usually credited with the authorship of the statements on which these comparisons rest. Lauchert, admitting that this may in a measure be the correct view, asks whence the impulse came to compare the acts or qualities of human beings with those of animals, and finds an answer in the influence exerted by the *Physiologus*



throughout the Middle Ages and into the Elizabethan period. Thus Chaucer has (*Nonne Prestes Tale*, 448-51):

"And Chauntecleer so free  
Song merier than the mermayde in the see;  
For Physiologus seith sikerly,  
How that they singen wel and merily."

Referring to the works of Lyly, Greene, Nash, Lodge and Gosson, the author then shows how they employ the traditional lore concerning the pelican, eagle, phoenix, viper (but this notion *does* come from Pliny; see my edition of Sidney's *Defense of Poesy*, 2. 26, note), basilisk, panther, unicorn, hyena, turtle-dove, stag, salamander, diamond or adamant, elephant, ichneumon, crocodile, ostrich and chameleon. But the euphuists did not confine themselves to extracting fabulous zoology from the *Physiologi*, but added similar matter from other sources, if not from their own invention. Illustrations are drawn, for example, from supposed facts concerning the lion, tigress, sow, tortoise, toad, gems like the aetites or draconites, the 'stone of Sicilia,' the 'fire stone of Liguria,' the 'pyrite stone,' and, to end this list, the 'roots of Anchusa. Shakespeare is also in some sense a euphuist, as Lauchert shows, using the similes of the pelican, eagle, phoenix, viper, unicorn, turtle-dove, adder, salamander, crocodile and chameleon.

W. Swoboda, *The Toussaint-Langenscheidt Method*. This is a successful mode of teaching modern languages by correspondence, of which we have heard much in America under other names. Swoboda's judgment is expressed in a single paragraph near the close of his article, which is here reproduced:

"If we are now to sum up the result and classify the Toussaint-Langenscheidt method, we must call it a methodical eclecticism, based, it is true, on the analytical-direct method of Hamilton and Jacotot, but strongly influenced by Robertson's bent toward the reflective method, and by the reflective method itself as applied by the Neohumanism of the 19th century first to the classical and then to the modern languages. The points of contact with the direct method of the present time, so far as they need to be considered, are the employment of coherent reading matter from the very outset, and the resulting drill with the help of questions asked in English [or whatever foreign language is to be learned]. This coincidence can, however, by no means be regarded as a proof that the direct method is a mere offshoot of the Toussaint-Langenscheidt, since there is a decided difference in aim and in the course pursued. With reference to what they possess in common, they should rather be considered as drawing independently from older sources. It may with more justice be assumed that the correspondence method, so far, in particular, as relates to the utilization of phonetics for purposes of language teaching, has profited by the direct method."

Those who are interested in the methodology of Modern Language teaching should consult the whole of Swoboda's paper.

The Book Notices have a review by A. Schröer of his own edition of the *Rule of St. Benet* and that by Logeman; by Schröer, of König's *Der Vers in Shakespeare's Dramen*; by Max Koch, of Raymond's *Poetry as a Representative Art*, and of a number of other books and dissertations by various hands.

The Miscellanea contains obituary notices of Delius and of Herrig, a wordy war between Lauchert and his reviewer, and an account by R. Ackermann of the Shelley Society and its publications.

III.—Julius Zupitza, *The Romance of Athelston*. III. *Epilegomena*. Zupitza concludes his edition of this romance with the same thoroughness already displayed. The poem is contained in but one MS, so far as is known, No. 175 of Caius College. There are 156 pages of double columns. The scribe is of the second half of the 14th century. Zupitza gives a summary of the contents of the MS, and also of the poem. The romance has almost nothing in common with authentic history. Alliteration is abundant, as Zupitza's table shows. Most of the strophes are of the kind known as twelve-line tail-rime strophes (59 out of 75), and the rime-scheme is generally *aab ccb ddb eeb*. The rime is almost always pure, so far as the vowels are concerned, but words in *m* sometimes rime with those in *n*, and other consonantal irregularities are found. The investigation of the dialect, first by Wilda (*Ueber die örtliche Verbreitung der zwölfzeiligen Schweifreimstrophe in England*), and afterwards by Zupitza, leads the former to the conclusion that it is Northern, while the latter pronounces it North Midland. The date may be ca. 1350. The paper closes with an index to the notes, occupying six pages of double columns.

Rudolf Fischer, *The Question Concerning the Authorship of Sir Clyomon and Sir Clamides*. The author undertakes an independent investigation, which leads him to a result opposed to Kellner's (*Engl. Stud.* 13, 187 ff.). He therefore vindicates Peele's authorship of the drama by the application of a variety of tests.

Horatio S. White, *Recent American Historical Publications*. White notices Tuttle's *History of Prussia* and Washburne's *Recollections of a Minister to France*.

The Book Notices are crowded out by the Miscellanea. The latter contains a long article by Emil Koepfel on the Textual Criticism of *Ipomedon*, and notes on *Ipomedon* A, B and C by George Lyman Kittredge. F. Holthausen has *Contributions to the Exegesis and Textual Criticism of Old and Middle English Monuments*, the latter including the *Blickling Homilies*, the first series of Old English Homilies, ed. Morris, and the *Legends of Mary* from the Lambeth MS, ed. Horstmann. Karl Breul contributes two Middle English Christmas Carols. Robert Boyle treats of *All's Well that Ends Well* and *Love's Labor's Won*. Sarrazin encounters Emil Koepfel's criticism in *Englische Studien*, Vol. XIII, with a rejoinder, and Koepfel replies. There is a second instalment of the study on Schaible's *History of the Germans in England* (see *Am. J. Phil.* XI 378), besides a number of minor articles.

ALBERT S. COOK.

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FLECKEISEN'S JAHRBÜCHER FÜR PHILOGIE UND PAEDAGOGIK. Jahrgang 1890. Fascicles 7-12.

Fascicle 7.

46. *Ueber datierung und veranlassung von Pindars zweiter Pythischer ode*: A. B. Drachmann, Kopenhagen. The poem is connected with the Olympian chariot-races of Ol. 78. The author's purpose is to heal the breach at that time existing between the poet and Hieron.

47. Bemerkungen zu Aristophanes: W. Pökel, Prenzlau. This is a continuation of similar notes published by P. in 1888 (Am. J. Phil. XXXVIII 250). The plays concerned in these notes are the Acharnians, Birds, Thesmophoriazusae. The great merit of the Ravenna MS, which is at the basis of many of these notes, is the excellence and correctness of accent.

48. Zu Xenophon: Critical notes made by O. May, Neisze, on Xenophon's Hell. III 2, 28 (read *περικλείσθη* for *περιεπλήσθη*), on III 4, 5 (read *ἐλπὶς γ' ἐστὶν* for *ἀλλ' ἐξεστὶν*), and on Cyr. II 1, 30 (transpose *ὥστε* *ικανήν*).

49. Zu Kleomedes ΚΥΚΑΙΚΗ ΘΕΩΡΙΑ ΜΕΤΕΩΡΩΝ: M. Lüdecke, Bremen. A very careful judgment of the relative value of the Cod. Lips. 361 of the library of the University at Leipsic.

50. Kleine beobachtungen zum lateinischen sprachgebrauch: M. C. P. Schmidt, Berlin. I. *Cernere* mit accusativus cum infinitivo; II. *Reperire* mit accusativus cum infinitivo. The citations are excellent, although no particular conclusions are reached.

51. Zu Ennius und Terentius: A. Fleckeisen, Dresden. A critical note on the Eunuchus of Terence, v. 590; for *sonitu concutit* Bentley conjectured *nutu concutit*. F. proposes *suo nutu concutit*. The line usually reads: *qui tēpla caeli summa sonitu concutit*.

52. Zu Vergilius: F. Weck, Metz. On Aen. II 57 ff. A critical study of the sense of the text from the line at which Sinon appears, through line 73.

(16). Frühlings Anfang: G. F. Unger, Würzburg. This is the conclusion of Unger's work which has appeared on this subject in two of the first six fascicles of this volume, and been noted in vol. XII of the Am. J. Philol., p. 249. This is an exhaustive collection of all the material which bears upon the Romans. The popular conception among them was that spring began at the equinox.

53. Zu Timaios: H. Kothe, Breslau. For *παρ' Ἀσσυρίων* read *παρὰ Τυρίων*, in the preface to the sixth book (Polyb. XII 28 a, 3 H).

Fascicles 8 and 9.

54. Die letzten aufführungen und das ende des alten Kratinos: H. Müller-Strübing, London. The traditional account of the death of Kratinos is at best unreliable; he was still living at the time of the presentation of the 'Peace' of Aristophanes; his *ᾠραι* was brought out at the Lenaea 421; his last piece is the *Σερίφοι*, 410 B. C. The article covers over thirty pages; some part of it was written ten years ago, though presented now with some corrections and additions.

55. Zu Aristonikos: A. Ludwig, Königsberg. Aristarchus pronounced *ἥρωι* as a dissyllable.

56. Dieuchidas und Dikaiarchos: H. Düntzer, Köln. This is a vigorous assault upon Wilamowitz, who holds the view that Dieuchidas is the oldest witness to the interest of Pisistratus in Homeric research.

57. Heinrich Schliemann und Ernst Böttcher: P. Habel, Breslau. This is an interesting statement of the differences, and their causes, between these

two archaeologists. It comes from the side of a warm and enthusiastic believer in Schliemann.

58. Ad Sophoclis Aiacem: R. Peppmueller, Stralsund. In v. 477 for οὐδενὸς λόγου βροτῶν read οὐδ' ἐνὸς λόγου βροτῶν.

(12). Zur katastrophe in Sophocles Antigone. This article is in reply to and directed against the theory of F. Seiler stated on p. 104 ff. of this year's (1890) volume, and noted in vol. XII of the Am. J. Philol., p. 249. It is by B. Nake, Berlin.

(43). Zu den Homerscholien: C. de Boor, Bonn. On Schol. A to Σ 486.

59. Ad Xenophontis Hieronem: C. Häberlin, Halle. A critical note on 10, 4, proposing <πάντες> εἰδείμεν for εἰδείεν.

(40). Zu Nonnos Dionysiaka: Otto Crusius, Tübingen. Critical notes on XLIII 212 and XLIII 196 ff.

60. Die kalenderdaten in Catos schrift *de agri cultura*: F. Olck, Königsberg. This paper is an attempt at a thorough investigation as to how far the calendar dates in the *de agri cultura* may be valuable in Roman chronology.

61. Ad Caesaris commentarios: J. S. Van Veen, Assen. Critical notes on *de bello civili*.

62. Zu Caesars zweitem zuge nach Brittanien: K. Petsch, Kiel. This article comes as a defense of Caesar's narrative, in reply to Lange, in the Jbchr., 1889, p. 187 ff. See Am. J. Philol., vol. XI, p. 115.

63. Zu Caesar de bello civili: A. E. Schoene, Blasewitz. Critical notes on the second book.

64. Studien zur geschichte Diocletians und Constantins. III. Die entstehungszeit der *historia augusta*: O. Seeck, Greifswald. Seeck agrees in the main with Dessau and Klebs, who put the date of the Hist. Aug. in the fifth century.

65. Zu Plautus Truculentus. A critical note by E. Redslob, Weimar.

Fascicle 10.

66. Zur composition der Hesiodischen Werke und Tage: R. Peppmüller, Stralsund. The question of the origin of the 'Works and Days' has been answered by A. Kirchhoff ('Hesiodos Mahnlieder an Perses,' Berlin, 1889) by the 'kleinlieder-theorie.' Peppmüller aims to demonstrate that the separate portions or stanzas are the organic parts of one distinct composition.

67. Zur Pindarischen Theologie: A. Rieder, Gumbinnen. A very useful collection of the material for a study of the different deities, the study of Pindar's deviations from Homer in his conception of life after death, of μοῖρα, and the worship of heroes.

68. ΩΡΑ = Stunde bei Pytheas: G. Biefinger, Stuttgart. A reply to the objections made by M. C. P. Schmidt against this theory. Schmidt's objections are found in the Jbhr. 1889, p. 826 ff.; A. J. P., No. 44, p. 526.

69. ΑΙΣΧΙΝΗΣ Ο ΣΕΛΛΑΟΥ: R. Meister, Leipzig. Meister recognizes in this Aeschines, so frequently satirized by Aristophanes, the Socratic philosopher,

son of Lysanias. 'Ο Σελλοῦ has the same sense as the adjectival ὁ Σελλιος, one who has the nature of the σελλός.

(47). Zu Aristophanes: F. Blank, Wien. Critical note on the Knights.

70. Die handschriften der hymnen des Mesomedes: C. von Jan, Strassburg. Of Bellermann's three classes the second must be abandoned. The archetypus of the MSS of the second class is the Ven. VI 2.

71. Die römischen schaltjahre seit 190 vor Christ. A demonstration that of the years 190-165 before Christ the even years were the leap years, and the odd the common years. The argument is by W. Soltau, of Zabern, perhaps the best qualified man to speak with authority on this subject.

72. De grammaticorum principe: O. Immisch, Leipzig. Antidorus (not Antodorus) of Cumae was the first who named himself γραμματικός, in the title of his λέξεις.

73. Zum heerwesen der Römer: P. O. Schjött, Christiania. A discussion of Livy, VIII, §8, on the number of men in a legion. 15 maniples in the *hastati*, with two centurions and one *vexillarius* = 945 men; with the same in the *principes* = 1890. 15 maniples of *subsignani*, each 186 men, = 2790; this + 1890 = 4680 in the legion. The remaining 320 necessary to make up the 5000 mentioned in the chapter may have been in the general's staff, the *fabri* and the musicians.

74. Zu Sallustius: R. Lehmann, Neustettin. Critical notes on I, Cato, 20, §8, and II, Cato, 21, §1.

75. Zu Livius: K. Niemeyer, Kiel. Critical notes on II 65, 4 f.; III 41, 8; III 35, 3; V 11, 2; VII 30, 11; VII 39, 10; VII 40, 9; X 9, 6; XXXII 32, 6; and XXX 13, 1-12.

76. Zu Januarius Nepotianus: C. F. W. Müller, Breslau. A demonstration in a number of passages of Nepotianus, that his latinity has been overestimated by new critics, while that of the manuscripts has been underestimated.

77. Zu [Apulejus] Asclepius: J. Segebode, Oldenburg. On c. 21: insert <Venerem> (= semen) after *rapiat* as object.

#### Fascicle 11.

78. Die stadt Athen im altertum, von Curt Wachsmuth; zweiter band, erste abteilung: Teubner, 1890. xvi + 527 pp., 8vo. Review by W. Judeich, Marburg. Sixteen years have passed since the appearance of the first volume, years so full of results that this new volume, which rests upon them, seems hardly to be a companion to the first. Though the work of Köhler, Lolling, von Wilamowitz, Milchhöfer, Curtius and others lies at hand for everybody, yet the work of Wachsmuth is not superfluous. It is a careful, painstaking production. The first division discusses 'die hafenstadt,' pp. 4-176; the second, 'die hafenstrasse,' pp. 177-96; the third, 'stadtmauern und stadthore,' pp. 197-230; the fourth, 'städtische demen und quartiere,' pp. 231-78; the fifth, 'die strassen der stadt,' pp. 279-303; the sixth, 'die agora,' pp. 305-527.



79. ΘΕΩΝ ΕΝ Γ' ΟΥΝΑΣΙ ΚΕΙΤΑΙ: F. Weck, Metz. The common reading γούνασι is untenable. For this W. proposes γ' ούνασι, and translates: "es kann so und so, es kann anders kommen, als nach menschlicher berechnung erwartet wird." ἐπιούσιος is also connected with ὄναρ, = der traumreiche, traumbringer. The function of Hermes as dream-god is signified in his epithet ἀκάκητα, = vorspiegler, gaukler (cf. ἀκκῶ, ἀκκίζομαι).

(5). Zur Odyssee: A. Scotland, Strasburg. Read a 28 thus: ἀλλ' ὃ γ' ὀδύρετο πικρὰ πατὴρ ἀνδρῶν τε θεῶν τε. Cut out vv. 37-42, and in 43 read: οὐκ ὀπίδα φρονέων for πεῖθ' ἀγαθὰ φρονέων.

80. E und ex vor consonanten in den fragmenten der ältern römischen poesie: F. Harder, Berlin.

(32). Ne . . . quidem: P. Meyer and M. C. P. Schmidt. Meyer opposes the view set up by Schmidt, p. 299 of this volume, by a different interpretation of the six test-passages given by Schmidt. The latter offers additional passages. See Am. J. Philol. XII 251.

81. Zu Horatius: F. van Hoff. This is à propos of what van Hoff's has already published on the third epode in the Treves gymnasial programme for 1887. Also an exegetical note by Th. Plüss on Od. II 20.

82. Zu Ausonius: M. Mertens, Köln. A study in the dates of the works of Ausonius.

83. Zu Julius Valerius: D. Volkmann. A series of critical notes.

(52). Zu Vergilius: Edward Goebel, Fulda. Critical note on Aen. I 194 ff.

#### Fascicle 12.

84. ΘΟΥΚΥΔΙΔΟΥ ΤΕΤΑΡΤΗ: W. G. Rutherford, London. Reviewed by K. Hude, Kopenhagen. Hude finds fault with the reckless rejection of some passages and the too ready conjectures in other places. It is far too evident that not enough discernment and industry are exercised by Rutherford in the establishment of his text.

85. Zu den Orphischen Theogonien: F. Susemihl, Greifswald. A discussion of several points as to the Orphic Theogony, in which Gruppe, who usually agrees with Susemihl, differs from him. Interesting in this connection are O. Kern's 'De Orphei Epimenidis Pherecydis theogoniis quaess. critt.' (Berlin, 1888) and Susemihl's 'De theogoniae Orphicae forma antiquissima.'

86. Zu Nikandros: E. Goebel, Fulda. Critical notes.

87. Zu Kallimachos. Critical notes on the hymns of Kallimachos by E. Dittrich, Leipzig.

88. Beiträge zu Polybios: Th. Büttner-Wobst, Dresden. III. A continuation from 1884, pp. 111-22, and 1889, pp. 671-92. The author of this article points out that Polybios avoids any hiatus with ἦ (or, than). A number of passages are also critically handled.

(12). Die katastrophe in Sophokles Antigone. A continuation and conclusion of the discussion opened by F. Seiler in the Jahrbücher, 1890, p. 104 ff.,

and continued by B. Nake, p. 569 ff. The question is: According to the purpose of Sophocles, is the inverted order in Kreon's acts of repentance [the visit to Polyneikes and then to Antigone] of importance or not for the final entrance of the catastrophe? Both disputants substantially agree that it is not.

(61). Zu Caesar De bello Gallico: A. Kunze, Planen im Vogtland. On *despectus* (*deiectus*?) in II 29, 3.

50. Kleine beobachtungen zum lat. sprachgebrauch: M. C. P. Schmidt, Berlin (to be continued). This is a continuation from pp. 463-66 of this volume. 3, 4, 5 treat of *invenire*, *experire*, *perspicere*, with the infin. and subj. accus.; 6, *praestare* with the infin. and subj. accus., and with *ut* or *ne*; 7-8, *praescribere* and *urgere* with *ut*; 9, *pugnare* with *ut* or *ne*; 10, *indicare* with the infin. and subj. accus.

WILLIAM E. WATERS.

#### REVUE DE PHILOGIE. Vol. XII.

##### No. 1.

1. Pp. 1-12. J. B. Mispoulet discusses the process at law that plays so important a part in Hor. Sermon. I 9. Bolanus was the defendant, and he himself had given the *vadimonium*. In case of *vadimonium desertum*, the plaintiff could either take temporary possession of the property of the defendant, or apply the *in ius vocatio*. The latter course was adopted in this instance. Bolanus had neglected his *vadimonium* to remain with Horace. The hour for the court to take recess had arrived, and then came the *in ius vocatio*. These points are well established, not merely conjectured.

2. P. 12. E. Rabiet shows that in Plin. Nat. Hist. III 4, 34 we should read *Dexivatum*.

3. Pp. 13-18. Émile Chatelain gives the history, the rediscovery and a description of a long-lost MS of Horace, formerly kept at Autun, now No. 10,310 of the National Library of Paris.

4. Pp. 19-25. A. Baudouin examines and classifies five MSS of Cic. De Inventione, which form two families distinct from the two represented by P, H, and S, which are the only MSS as yet used to any considerable extent.

5. Pp. 26-29. George Doncieux critically discusses and emends [Tibul.] IV 8 and 9, poems of Sulpicia.

6. P. 29. In Arist. Phys. II 2, 194 b 13, Ruelle proposes *χρυσός* <*χρυσόν*> for *ἡλιος*.

7. Pp. 30-37. Louis Duvau emends Lucr. De Rer. Nat. IV 792 ff., so as to read: Quia tempore in uno, | cum sentimus idem, cum vox emittitur una, | tempora multa latent, etc. He then shows that Lachmann erred in supposing that the original of the *Oblongus* was written in capitals.

8. Pp. 38-42. In Cic. Verr. II 4, 90 Paul Lejay proposes *religione tecti te vinctum adstrictumque*, and discusses the character of the MS from which R was copied.

9. P. 42. In Ter. Heaut. 530-32 L. Havet proposes: CHREMES: Hominem pistrino dignum. SYRUS: Quem istunc? CHREMES: Servolum | dico adulescentis. SYRUS: Syre, tibi timui male. | CHREMES: Qui passus est id fieri? SYRUS: Quid faceret?

10. Pp. 43-59. The construction of *POTIUS QUAM*, by O. Riemann. After remarking on the inadequate treatment of this subject in all grammars, including his own, Riemann enumerates and classifies all the examples known to him, regretting that the list is incomplete. (a) *Potius quam* with the subjunctive is employed when a person placed between two alternatives chooses one with the object of avoiding the other; as *perpessus est omnia potius quam conscios . . . indicaret*. (b) *Potius quam* with the dependent verb in the mood of the leading verb to indicate that the latter is more exact or in some way truer than the former; as *fecerat potius cur suspectus esset Romanis quam satis statuerat utram foveret partem*. But the distinction between these formulae is not invariably observed, and special cases arise.

I. 1. When the leading verb is a form of *sum* with *-ndus*, the two constructions would naturally be as in these examples: (a) *Moriendum nobis est potius quam hoc patiamur*. (b) *Vivendum nobis est potius quam moriendum*. But in fact before Livy construction (b) alone is used in both senses; as Cic. Verr. II 1, 81, ut Lampsaceni moriendum sibi potius quam *perpetiendum* putarent. Id. P. Dom., §100, demigrandum potius aliquo est quam *habitandum* in ea urbe, etc. In these and some other examples in Cicero, the sense is evidently that of construction (a). But cf. Liv. VII 40, 14, vel iniquis standum est potius quam impias inter nos *conseramus* manus. Of course, construction (b) in its proper sense is common, as Cic. Off. I 112, Catoni . . . moriendum potius quam tyranni vultus *aspiciendus* fuit.

2. Also when the leading verb is some form of *-urus sum*, Cicero once (Ad Fam. II 16, 3) and Caesar once (De Bel. Civ. III 49, 2), use construction (b) in the sense of (a). No other examples of either construction have been found in these authors. Construction (a), on the other hand, is found in Terence, Sallust, Cornelius Nepos, Livy, Tacitus (usually, of course, *-urum (esse)* potius quam with subjunc. pres. or imperf.; but *esse* is always omitted, while *fuisse* occurs Liv. IV 2, 9).

II. 1. When the leading verb is in the indicative (not periphrastic), construction (a) exhibits the pres. or impf. subjunc. after *potius quam*, according to the time of the leading verb, and construction (b) exhibits the indic. after *potius quam*; but in Cic. P. Dom. 56 (*cur me flentes potius persecuti sunt quam aut increpantes retinuerunt aut irati reliquerunt?*) and in Plaut. Cist. 358 (*perdam operam potius quam carebo filiam*) the sense seems to call for construction (a).

2. When the leading verb is imperative, all the examples exhibit construction (a) in both form and sense, the verb being in the pres. subjunc.

3. When *potius quam* is attached to a *pres.* or *imperf.* subjunc., the two constructions become identical in form, the verb introduced by *quam* being in the pres. or imperf. subjunc.

4. When, however, *potius quam* is attached to a *perf.* or a *pluperf.* subjunc., the two constructions are distinguished by their form, (a) having the *imperf.* subjunc., (b) the *perf.* or *pluperf.* (same mood and tense as its leading verb).

But in Cic. Cat. II 3 (si quis est . . . qui . . . me vehementer accuset quod tam capitale hostem non comprehenderim potius quam *emiserim*), construction (*b*) seems to be used in the sense of (*a*): cur non comprehendit potius quam emisit?

III. 1. If the leading verb (indic.) has been converted into an *infin.* by indirect discourse, construction (*a*) probably retains the subjunc. unchanged after *potius quam*. Cf. Liv. II 15, 2. But as the *fut. indic.* assumes the form *-urum esse*, the peculiarity already mentioned (I 2) reappears. Construction (*b*) (*infin.* for *indic.*) seems to be used in the sense of (*a*) in Cic. P. Dei. 23, non quaero quam veri simile sit . . . , qui dicto audientes in tanta re non fuissent, eos victos potius quam *necatos* (direct, "cur eos vixit potius quam *necaret*?"). So in Cic. Ad Att. II 20, 2 (addit . . . se prius occisum iri ab eo quam me *violatum iri*, the only example of a future *pass.* in indirect discourse) construction (*b*) seems to have the sense of (*a*).

2. When *potius quam* is attached to an infinitive not in indirect discourse, the following formulae arise: Construction (*a*), "Abire decet potius quam haec *patiari*." "Expedit tibi abire potius quam haec *patiari*." "Abire cupimus potius quam haec *patiamur*." Construction (*b*), "Abire decet potius quam *manere*." "Abire expedit potius quam *manere*." "Abire cupimus potius quam *manere*." But sometimes construction (*b*) is used in the sense of (*a*). Cf. Cic. Verr. II 3, 99; De Fin. 4, 20, etc., where (*a*) is regularly employed. Cic. Verr. II 3, 191; Liv. VII 21, 1, etc., where (*b*) has the sense of (*a*). Some doubtful examples occur.

3. With *malo* (*praestat, satius est*) . . . *quam*, two infinitives are naturally used. When *potius* is pleonastically added to *malo*, etc., the construction seems regularly to remain the same; but sometimes *quam* is followed by the *subjunc.*, as Plaut. Capt. 681 f.; Ter. Hec. 532 ff. The *subjunc.* is sometimes used even when this *potius* is not added; that is, construction (*a*) is even in this case sometimes distinguished from (*b*). Cf. Plaut. Asin. 121 f., Aul. 653 f.; Caes. VII 17, 7, etc. The examples cited by C. F. W. Müller from Cicero (Verr. II 4, 39; 2, 91) seem doubtful; that is, the *infin.* should probably be read.

IV. One example is found of a *participle* connected by *potius quam* with the *subjunc.*, the sense and construction being (*a*): Liv. XXXIII 13, 3.

V. 1. Instead of *potius quam*, sometimes the following are used in the same sense and with the same construction: *quam* alone, *prius quam*, *citius quam*, but probably never *ante quam*. All the examples of *citius quam* have the *fut.* in the leading clause.

2. The use of *potius* (*citius*, perhaps *prius*) *quam* with *ut* may have grown illogically out of such formulae as Cic. P. Planc. 8, tantum afuturam esse orationem meam a minima suspicione offensionis tuae, te *ut* potius obiurgem, *quam ut*, etc., where the second *ut* is a repetition of the first one. Very difficult to explain is Cic. Phil. 2, 25, citius dixerim iactasse se aliquos, ut fuisse in ea societate viderentur . . . *quam ut* quisquam celari vellet qui fuisset. Still, it furnishes a connecting link between the logical and the illogical *potius quam ut*.

[It will be observed that those examples in which the author considers the use of the indicative after *potius quam* illogical (see II above), do not belong exactly to either category; that is, they do not show that one expression is

more exact than another, nor do they imply conscious *avoidance* of an alternative on the part of the actor; but the *narrator* merely declares that one thing occurred instead of another's occurring, whereas, according to his view, the second would have been more appropriate or natural. (a) "The army fled rather than retreated" = "The withdrawal of the army was flight rather than a retreat," would *require* the indicative. (b) "The army allowed itself to be destroyed rather than retreat," would *require* the subjunctive. (c) "Why did he let Catiline go rather than arrest him" (= "instead of arresting him") differs from both the above; and the indicative does not seem illogical, although the subjunctive is the rule. So in the English we may doubt whether 'arrest' depends directly upon 'rather than' or is affected by 'did'; that is, we might either say "I wonder why he let C. escape rather than *arrested* him" (not usual, but intelligible), or "rather than *arrest* him": *cur emiserit potius quam comprehenderit* or *comprehenderet*. The latter suggests a conscious choice of the actor between the two courses he might have pursued, and with *cur* this is more natural. But in (a) above we have exclusively the narrator's view, and in (b) exclusively the conscious choice of the actor between two alternatives. M. W. H.]

11. Pp. 60-73. Critical notes, by Paul Tannery, on the treatise of Joannes Alexandrinus (Philoponus) on the astrolabe. This interesting article contains a very important contribution to the history of astronomy (especially of astronomical instruments), besides many emendations of the text of Philoponus.

12. Pp. 73-80. E. Chatelain publishes numerous conjectures found written on the margin of a copy of Quintius Curtius by L. Quicherat.

13. P. 80. L. Havet emends Plaut. Aul. 250, Impero auctor <tibi> sum, etc.

14. Pp. 81-86. Biographical sketch of Louis-Eugène Benoist, by E. Chatelain. Benoist was born at Nangis (Seine-et-Marne) Nov. 28, 1831, and died at Paris May 22, 1887. After a short sojourn at the college of Fontainebleau, he studied at the *Institution Jauffret* and the *Collège Royal* (1842), entered the *École Normale* (1852), and was made professor (1855) at the *Lycée* of Marseilles. In 1862 he was made *Docteur ès Lettres*. His earlier studies were directed chiefly to historical subjects; but his habit of thoroughly studying the sources led him into philology, to which he finally devoted his labors. His edition of Vergil, of which the first volume appeared in 1867, created an epoch in the history of philology in France. He held positions successively at Nancy and Aix, and in the Sorbonne; and finally was elected a member of the Academy of Inscriptions. He published many works, chiefly editions of Latin authors, or critical articles on parts of Latin works. He was never willing to publish a work on any subject without first examining all that had been written on that subject; and he exercised a wholesome influence on students, by inspiring them with a spirit of thoroughness and method. A list of his works occupies three pages of the *Revue de Phil.* The most of them are on Plautus, Terence, Lucretius, Vergil, Horace, Catullus, Caesar, Livy; some are on educational subjects; and among them are a Latin-French and a French-Latin dictionary for students.

15. Pp. 87-96. Book Notices. (1). Virgilii Maronis grammatici Opera, edidit Johannes Huemer, 1886; M. Hertz, De Virgilii Maronis grammatici



epitomarum codice Ambianensi Disputatio, 1888; and E. Ernault, De Virgilio Marone grammatico Tolosano, 1886: all reviewed in a body by Paul Lejay, who gives a brief *précis* of each work. (2). Ch. S. notices favorably Lautensach, Verbalflexion der attischen Inschriften, 1887, and gives a list of the most important facts presented in the work. (3). A. K. mentions favorably Ad. Bauer, Thukydides und H. Müller-Strübing, 1887. (4). E. C. highly commends C. Sallusti Crispi, Jugurtha, Historiarum reliquiae codicibus servatae: Henricus Jordan tertium recensuit. (5). Favorable mention, by E. C., of C. Sallusti Crispi Bellum Jugurthinum: Scholarum in usum recognovit Robertus Novak, 1888. (6). E. C. briefly describes P. Ovidii Nasonis Metamorphoseon XIII-XIV (edited by Charles Simmons). (7). E. C. commends Cornelii Taciti Opera (Dialogue des Orateurs), par Henri Goelzer. (8). E. C. briefly describes A. Ed. Chaignet, Essais de métrique grecque: Le vers iambique. (9). Contents of Paléographie des classiques latins, par E. Chatelain. 6e livraison: Horace, 1888.

## No. 2.

1. Pp. 97-105. O. Riemann justifies the emendations (some thirty) that he introduced into the text of his edition of Livy, XXVII-XXX.

2. P. 105. Note by A. Gasc-Desfossés on the use of *quisque* in Cicero's Orations.

3. Pp. 106-112. Critical discussion of a few passages in Plaut. Aulularia, by Louis Havet.

4. P. 112. In Sal., Frag. Orléans, 9, 14, Max Bonnet proposes '*remissione*.'

5. Pp. 113-117. Jules Nicole publishes a few small fragments of Hesiod, found among some Aegyptian papyri. They fall between 'Epya 111 and 221, and are not without value.

6. P. 117. O. R. considers *esse* an *impf.* in Cic. Pro. Arch. 8.

7. Pp. 118-27. J. Loth describes a new MS of Seneca De Remediis Fortuitorum, which he discovered at Quimper, and publishes a complete text, with critical apparatus.

8. P. 127. O. R. calls attention to the use of a doubly subordinate clause with a seemingly dependent *final* or *consecutive* subjunctive, as if *ut* had been used; as Cic. De Orat. I 167, petebat . . . quod cum impetrasset causa *caaderet*, where *caaderet* is not grammatically connected with either the relative or the leading clause.

9. P. 128. Notes by O. R. on Plat. Phaed. 63 d and 118 a.

10. Pp. 129-34. George Doncieux discusses the question who the Lygdamus of [Tibullus] Book III was. He shows that it could not have been any of the persons heretofore proposed: Tibullus himself, Ovid, Cassius of Parma, Valgius Rufus, Lucius Messalinus; and argues ingeniously that it was Lucius, the brother of Ovid.

11. P. 134. In Senec. (ad Lucilium) 88, 17, Max Bonnet suggests *detraho* for *desperabo*.

12. P. 135. O. R. shows that the troublesome *first* entrance into the *φρουριστήριον* (Ar. Nub. 184) was merely into the yard. He seems not to have seen Zieliński's similar explanation.

13. P. 136. F. Strowski defends *sed* = *nunc vero* by referring to Cic. De Off. III 3, 12, and O. R. adds Ad Q. Fr. I 1, 44.

14. Pp. 136-37. O. R. shows that not only the abl. (as Madvig states), but also the locative, is used of the place from which a letter is written. If the noun is not the name of a town, we find *de*, *ex*, *ab*, and once *in* (Cic. Ad Att. 16, 10).

15. Pp. 137-38. Max Bonnet shows that in Senec. Phoen. 363 ff., *ultra* should not be changed to *ultra*, as has been done by recent editors.

16. Pp. 138-44. Book Notices. (1). F. de S. finds great merits and a few small faults in the Principles of Sound and Inflection as illustrated in the Greek and Latin Languages, by J. E. King and C. Cookson, Oxford, 1888. (2). Albert Martin describes the third edition of Böckh's Staatshaushaltung der Athener. He commends the reviser for abstaining as much as possible from making alterations in the great original, but finds the plan adopted inconvenient, especially as the additions to both volumes are all printed in the second volume. (3). Albert Martin finds J. M. Hoogvliet's Studia Homerica (1885) an ingenious work in some respects, but lacking in critical method. (4). A. M. D. finds great faults and some merits in the first volume (Antigone) of Semitelos' edition of Sophocles. (5). According to A. M. D., in the Oedipus Tyrannus of J. Holub, "l'ignorance le dispute au mauvais goût." (6). A. M. D. commends F. W. Schmidt's Kritische Studien zu den griechischen Dramatikern (1888), but points out slight faults. (7). Albert Martin describes and praises S. Lederer, Eine neue Handschrift von Arrian's Anabasis. (8). Albert Martin pronounces the dissertation of Wendland, De Musonio Stoico, interesting and instructive. (9). E. C. describes and commends L. Annaei Senecae dialogorum libros XII ad codicem praecipue Ambrosianum recensuit M. C. Gertz, 1886. (10). E. C. briefly describes Gundermann's Juli Frontini Strategematon libri quattuor, 1888. (11). A. M. D. praises La Bibliothèque de Fulvio, par Pierre de Nolhac, 1887.

No. 3.

1. Pp. 145-72. An interesting article by Louis Havet on the punishment of Phlegyas in Verg. Aen. VI, in which it is shown that vv. 616-20 belong between 601 and 602, and the latter should begin *Quo super*.

2. P. 172. Some examples of *et non* = *nec* cited by A. Meillet.

3. Pp. 173-75. An interesting note by Henri Weil on the fragments of Hesiod published by Nicole (No. 2, pp. 113-17).

4. P. 175. Note on Arist. Eth. Nicom. I 2 (p. 1365 A 33), by Ruelle.

5. Pp. 176-85. Remarks on some questions of Latin syntax, by O. Riemann.

I. *Unus* with the genitive in Cicero. The old rule was that *unus* is construed with the gen. only when it is contrasted with *alter* (*alius*), *tertius*, etc. Some grammarians have set up a new rule, that *unus* is construed with the gen. only

when the *sum total* of the objects has been indicated in what precedes. Riemann examines the usage of Cicero, and finds that both rules are at fault, and that *unus* is construed with the gen. of the rel. or demons. pron., representing a group of objects that have just been mentioned. The usage of other authors (Caesar, Livy, Vergil), however, differs from that of Cicero.

II. *Toto orbe terrarum* or *in toto orbe terrarum*. The author examines a distinction suggested by Émile Thomas—that *tota Sicilia* means *throughout all Sicily*, while *in tota Sicilia* means *within the limits of all Sicily*. He finds that the idea of *throughout* is nearly always expressed by the simple abl. in Cicero, and virtually always in Caesar, Nepos and Livy; while the idea of *within the limits* is expressed in either way in Cicero and Livy, no examples being found in Caesar or Nepos. In some instances the use of *in* with the abl. would be impossible, the sense being not *ubi*, but *qua*, as in 'sparserunt se toto passim campo' (= *per totum campum*). When *in* is not used, *totus* is almost always placed *before* its noun.

6. Pp. 185-86. F. Picavet explains an inscription that is important for the history of Pyrrhonism.

7. Pp. 187-89. Critical notes on Plaut. *Auf.* 720 ff., 808 ff., by Louis Havet.

8. Book Notices. (1). E. C. describes Vol. II of the *Corpus Glossariorum Latinorum*. (2). A. J. describes Van Leeuwen and Da Costa's *Homeri Iliadis carmina cum apparatu critico*, 1887, and considers it indispensable for critics of Homer, though not free from faults. (3). A. J. describes von Essen's *Index Thucydideus*, 1887, and (4) Heikel's *De praeparationis Euangelicae Eusebii edendae ratione*, 1888, and (5) Niese's *Flavii Josephi opera*. (6). E. C. describes the third volume of *Die Handschriften der herzoglichen Bibliothek zu Wolfenbüttel*, by Otto von Heinemann.

No. 4.

This number merely finishes the *Revue des Revues*, partly published in previous numbers.

MILTON W. HUMPHREYS.

## BRIEF MENTION.

In an introduction to NEITZERT's *German Translation* (Leipzig, B. G. Teubner) of Professor HALE's well-known '*Cum-constructions*,' to which we owe the disappearance of the unsatisfactory phrase 'Absolute and Relative Time' from some of our 'epoch-making' Latin grammars, Professor B. DELBRÜCK has a word of praise for American work in grammar, and speaks of 'Arbeiten die als Muster historisch-statistischer Ausführung gelten können.' The only danger is that American scholars will be encouraged by such utterances to do statistical work without a clear conception of what they are looking for, and as one who has made experiments in this field, I desire to protest again, as I have often protested before, against mere statistic-mongery. To this end I allow myself to reproduce here the introduction to a little paper, which for good and sufficient reasons I brought out in another periodical.

"The statistical method has been so much misused since it became the fashion that even those who helped to make it fashionable are becoming weary of the mechanical sorting of inorganic and insignificant facts, which can have no claim either to aesthetic or to scientific importance. What points deserve statistical study is a matter that is to be determined by insight before investigation begins, and the preciousness of statistics consists in exhaustive verification of what was already divined. Whenever this line is transgressed one hears the mocking song of Friedrich Vischer :

Lass ersterben die Aesthetik,  
Lass erblühn die Arithmetik!  
Schüler, auf zum Heiligtume  
Der addierten Bröselkrume  
Walle feierlichen Schritts, u. s. w.

In every statistical research in which I have myself engaged or encouraged others to engage I have always discerned, or fancied I discerned, an organic principle, and no less in my first published paper than in my latest."

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The object of the paper to which I refer was to meet a charge of rash generalization brought against me by Professor EDWARD B. CLAPP in the *Transactions of the American Philological Association* for 1891. In an examination of the conditional sentences in the Greek tragic poets Professor Clapp undertook to show that the minatory and monitory force of the future with *ei* 'can at best be nothing but an ill-defined and unconscious tendency which is not followed with sufficient regularity either upon the positive or negative side, to amount to a rule or even a fixed habit.' Suffice it to say

that of the fifty-odd examples cited by Professor Clapp to prove that *ei* with the fut. ind. does not differ from the ordinary condition, the vast majority, not to say all, have been shown to fall under the regular categories of *ei* with the future ind., and that the principles laid down in my article of 1876 (see A. J. P. IX 491) remain, not only unshaken, but stronger than ever.

Of this rejoinder to Professor Clapp, which may be found in *The Johns Hopkins University Circulars* for June, 1892, I will not repeat what had to be said in vindication of the character of my work, but part of the new material introduced has a certain scientific interest, and is inserted here for the benefit of those who have not access to the Circulars.

"That *ei* with the future indicative is used by preference in a stern sense, in minatory and monitory connexions, is evident to any one who will study the monuments of the language. The phenomena in the tragic poets [are] not isolated. [Indeed,] the whole history of the language favors the theory of the stern character of *ei* with the future indicative. Homer does not make much use of the form, it is true, but see the examples in Ebeling's *Lexicon Homericum*. How many of them fall outside of the categories in controversy? Pindar has not a solitary clear *ei* with future indicative. Why should he? What had he to do with menace? How much with gloom? Not a solitary clear *ei* with future indicative, did I say? Yes, there is one in his famous fragment on the Eclipse of the Sun (107 Bgk.), and that *ei* with future is in line with the horror of the occasion. I have before me a complete collection of *ei* with the future indicative in Herodotos, made by my former pupil, Dr. Lodge.<sup>1</sup> Thirty-two out of the thirty-nine examples recorded are as gloomy as one can desire. To be sure one must not pop into the text, pick out a gloomy word here and a bright one there. The whole situation must be studied, and then Artabanos' *μαθηρέων*, Hdt. 7, 16, 3, will be dismal enough. Thukydides is true to the rule, truer even than I thought sixteen years ago, when I made a rough count of the conditionals in the speeches. Now I have before me a more exact list of all the *ei* with the future indicative conditionals, prepared by my friend Professor Hogue, some 103 in all.<sup>2</sup> They are not all conditionals. Some may be classed as interrogative, some are mere *pro forma* conditions, but of

<sup>1</sup> I 32, 13; 32, 37; 71, 14; 109, 7; 109, 12; 207, 14; 212, 12; II 11, 15; 13, 18; 14, 6; 17, 6; 99, 14; 121 γ 13; III 36, 25; 71, 17; 73, 2; IV 33, 20; 125, 16; 163, 11; VI 9, 20; 11, 10; VII 9, 7; 10 θ 9; 11, 11; 16 γ 10; 16 γ 13; 46, 9; 50, 8; 161, 17; 172, 13; 209, 16; 236, 8; 236, 15; VIII 3, 3; 62, 3; 108, 11; 112, 5; IX 2, 9; 21, 10. (To facilitate reference, the lines of the Teubner text have been added.)

<sup>2</sup> I 32, 1; 32, 5; 35, 3; 36, 3; 40, 3; 40, 6; 42, 1; 52, 1; 53, 4; 68, 3; 73, 2; 77, 6; 80, 4; 81, 3; 81, 4; 81, 5; 82, 1; 82, 5; 118, 3; 121, 5; 122, 2; 124, 1; 137, 2; 140, 5; 141, 1; 142, 4; II 20, 3; 53, 3; 64, 1; III 2, 3; 12, 2; 13, 6; 14, 1; 28, 1; 32, 2; 37, 3; 39, 7; 47, 3; 56, 3; 57, 1; 58, 5; 84, 3; IV 37, 1; 60, 1; 68, 6; 83, 5; 85, 5; 87, 2; 87, 3; 120, 3; V 14, 4; 26, 2; 30, 1; 46, 4; 56, 2; 57, 1; 64, 1; 104; 104 (elliptical); 111, 2; VI 6, 2; 18, 3; 18, 4; 30, 2 (fut. opt.); 33, 4 (elliptical, Classen supplies *δοξω λέγειν*); 34, 2; 34, 5 (fut. opt.); 38, 4; 40, 1; 60, 4; 62, 1; 69, 3; 80, 2; 80, 3; 80, 4 (bis); 86, 1; 86, 5; 87, 4; 91, 1; 91, 3; 91, 4; VII 5, 4; 8, 1; 13, 1; 14, 3; 42, 2; 60, 2; 64, 1; 73, 1; VIII 43, 3; 45, 5; 47, 1; 53, 2 (bis); 53, 3; 55, 2; 83, 3; 86, 7; 91, 2; 91, 3; 96, 3; 109, 1.



the ninety-odd that are clearly conditional, the vast majority, including μέλλω conditions and conditions with verbs of emotion, carry with them an unfavorable alternative, and not more than five or six per cent can be wrested from the sinister meaning that lies in the form, and which is so appropriate to the great tragedy of the Peloponnesian War."

"Xenophon is true to the rule. Plato is true to it. The orators are true to it. And the later Greek stylists, such men as Dio Chrysostomos and Lucian, observe it with remarkable fidelity, and I might fill pages with sporadic examples, if it were worth while. In fact it is only the divergencies from the rule that are interesting."

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This is not an educational journal, yet nearly all philologists are teachers, and no philologist, whether teacher or not, ought to shut his eyes to the signs of the times, and among the signs of the times is the success of certain school-book enterprises. True, the issue of some text-books is explicable on the simple theory that the manufacturer controls a certain market, but this does not seem to apply to a series that, for a wonder, has not been imitated in this country—the series published by Freytag in Leipzig, one of the latest specimens being the third edition of WOTKE's *Demosthenes, Ausgewählte Reden*. The plan is a large, fair type—too thin, yet large and fair—literary and historical introductions in German, historical notes, maps, illustrations, indexes of various matters, historical, geographical and the like, and not a solitary word of grammar, not a solitary interpretation of the text. There is, it seems, a decided place for such a series in an educational scheme, and that a surfeit of such grammatical notes and such bald translations as load down our text-books should have led to a total rejection of the perilous stuff is perfectly natural. The many commentators, who are not grammarians, serve, as I have shown and expect to show at length some day, to propagate all manner of errors, and a grammatically sterilized edition is a comfort.

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With the beginning of a new volume the management of the AMERICAN JOURNAL OF PHILOLOGY deems it expedient to repeat the notice to authors and publishers that it does not guarantee reviews of books, no matter how important they may be, nor does it undertake to return books that are not reviewed. The review department is necessarily restricted in space, and quite unequal to the task of characterizing all current philological literature. That 'Brief Mention' has practically become a synonym for 'Editor's Table' is not wholly the editor's fault.

## RECENT PUBLICATIONS.

Thanks are due to Messrs. B. Westermann & Co., New York, for material furnished.

### AMERICAN.

Abbott (Evelyn). A History of Greece. Pt. 2, 500-445 B. C. New York, *G. P. Putnam's Sons*, 1892. 6 + 541 pp. 8vo, cl., \$2.25.

Autenrieth (G.) A Homeric Dictionary, tr. by Rob. P. Keep, rev. by I. Flagg. New York, *Harper*, 1891 [1892]. 14 + 297 pp., il. maps. cl., \$1.10.

Carrier (A. S.) The Hebrew Verb. Chicago, *Max Stern & Co.*, 1891 [1892]. c. '91. 2 + 33 pp. 8vo, bds., 50 cts.

Dante Alighieri. Hell; ed., with tr. and notes, by Arthur J. Butler. New York, *Macmillan & Co.*, 1892. 15 + 435 pp. 12mo, cl., \$3.50.

Davidson (T.) Aristotle and Ancient Educational Ideals. New York, *C. Scribner's Sons*, 1892. c. 8 + 256 pp. 12mo, cl., net, \$1.

Earle (J.) The Philology of the English Tongue. 5th ed., rev. and enl. New York, *Macmillan & Co.*, 1892. 16 + 744 pp. 12mo, cl., \$2.

Engelmann (R.) and Anderson (W. C. F.) Pictorial Atlas to Homer's Iliad and Odyssey, with descriptive text. New York, *B. Westermann & Co.*, 1892. 35 pp., pl. obl. 4to, cl., \$3.

Homer. Iliad. Done into English prose by Lang, Leaf and Myers. Rev. ed. New York, *Macmillan & Co.*, 1892. 8 + 506 pp. 12mo, cl., \$1.50.

Mahaffy (J. P.) Problems in Greek History. New York, *Macmillan & Co.*, 1892. 24 + 240 pp. 12mo, cl., \$2.50.

Miller (O. D.) Har-Moad: a series of archaeological studies. North Adams, Mass., *Stephen M. Whipple*, 1892. 21 + 445 pp., por. il. pl. 8vo, cl., \$3.00.

Murray (A. S.) Handbook of Greek Archaeology. New York, *C. Scribner's Sons*, 1892. il. 8vo, cl., \$6.

Sargent (J. Y.) A Primer of Greek Prose Composition. New York, *Macmillan & Co.*, 1892. 15 + 167 pp. 16mo, cl., 90 cts.

Sayce (A. H.) Records of the Past. New series. V. 5. New York, *Ja. Pott & Co.*, 1892. 15 + 176 pp. 12mo, cl., \$1.75.

Soule (R.) Soule's Synonymes. New ed., rev. and enl. by G. H. Howison. Philadelphia, *J. B. Lippincott & Co.*, 1892. 488 pp. 12mo, cl., \$2.25; mor., \$2.75.

Xenophon. First four books of Anabasis, ed. by W. W. Goodwin and J. Williams White. Boston, *Ginn & Co.*, 1892. 4 + 290 pp. 12mo, hf. leath., \$1.65.

— Hellenica. Books V-VII, ed. on the basis of Büchschütz, by C. E. Bennett. Boston, *Ginn & Co.*, 1892. c. 3 + 234 pp. 8vo, cl., \$1.50.

## BRITISH.

Annandale (Charles). A Concise Dictionary of the English Language. *Blackie*. xvi + 848 pp. Fcap. 4to, 5s., 6s. 6d.; hf. mor., 9s.

Aristophanes. *The Frogs*. With an English version by D. G. Hogarth and A. D. Godley. 8vo, sd. *Clarendon Press*. 2s.

Beame's (J.) *Grammar of the Bengali Language: literary and colloquial*. 12mo. *Clarendon Press*. 4s. 6d.

Bendall (H.) and Laurence (C. E.) *Graduated Passages from Greek and Latin Authors for First-sight Translations*. Part 2. Moderately easy. Cr. 8vo, 133 pp. *Cambridge Warehouse*. 2s.

Berdoe (E.) *The Browning Cyclopaedia*. Cr. 8vo, 580 pp. *Swan Sonnenschein*. 10s. 6d.

Bosworth (J.) *An Anglo-Saxon Dictionary*. Edit. and enlarged by T. Northcote Toller. Part 4, Section 1. 4to, sd. *Clarendon Press*. 8s. 6d.

Bywater (J.) *Contributions to the Textual Criticism of Aristotle's Nicomachean Ethics*. 8vo, sd. *Clarendon Press*. 2s. 6d.

Caesar. *The Gallic War*. Book 3. Edited by J. F. Brackenbury. 12mo. *Percival*. net, 1s. 6d.

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Owing to delay in the transmission of proof and the exigencies of the printing-office, Mr. Housman's article in this number of the Journal appears without the advantage of the author's revision. It was impossible for the Editor of the Journal to anticipate the searching character of that revision, and this must be his apology to Mr. Housman and to the readers of the Journal for the publication of the article in its uncorrected form.—B. L. G.